ANEXO II-I

LISTA DE SÍMBOLOS

SIMATIC ...or\CPU 314IFM-CPU\Parque Bicicletas\Symbols 09/21/2011 16:31:35

Properties of symbol table

Name:	Symbols
Comment:	
Created on	04.07.2011 18:25:44
Last modified on:	21.09.2011 12:17:02
Last filter criterion:	Alle Symbole
Number of symbols:	68/ 68
Last Sorting:	Address Ascending

Symbol	Address	Data type	Comment
DB DADOS	DB 1	DB 1	Guarda o registo dos utilizadores e dos ciclos de utilizacao
FC MOTOR CONTROL	FC 1	FC 1	Controla o movimento dos motores
FC COMPARE	FC 2	FC 2	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
FC SEARCH EMPTY	FC 3	FC 3	Procura uma UA vazia
FC SEARCH ID	FC 4	FC 4	Procura a UA associada ao ID
FC GO POSITION	FC 5	FC 5	Funcao que cordena o movimento do MA para a ZER
FC GO HOME	FC 6	FC 6	Funcao que cordena o movimento do robo para a posicao HOME
FC CHECK	FC 7	FC 7	Verifica o conteudo da UA
FC REGISTER	FC 8	FC 8	Regista a operacao de check-in/check-out
FC OPERATION	FC 9	FC 9	Cordena a operacao de checkin checkout
D TOD DT	FC 13	FC 13	Date and TOD to DT
DT DATE	FC 16	FC 16	DT to DATE
DT TOD	FC 18	FC 18	DT to TOD
SB DT DT	FC 34	FC 34	Subtract DT - DT
TIM S5TI	FC 40	FC 40	IEC Time to S5 Time
X1	I 124.0	BOOL	
X2	I 124.1	BOOL	
X3	I 124.2	BOOL	
X4	I 124.3	BOOL	
X5	I 124.4	BOOL	
X6	I 124.5	BOOL	
X0	I 124.6	BOOL	
UA LOCK STATE	I 124.7	BOOL	Estado do bloqueio da UA
UA CHECK OK	I 125.0	BOOL	Verificacao da UA - Conteudo OK
DOOR CLOSED	I 125.1	BOOL	Portas automaticas - Estado Fechadas
UA CHECK FAIL	I 125.2	BOOL	Verificacao da UA - Conteudo INVALIDO
Z0	I 125.3	BOOL	
Z1	I 125.4	BOOL	
Z RECEPTION	I 125.5	BOOL	Z na zona de recepção e na zona de pesagem
Y1	I 125.6	BOOL	
Y2	I 125.7	BOOL	
USER OPERATION	I 126.0	BOOL	Comando Utilizador operacao de entrega/recolha
USER DOORS	I 126.1	BOOL	Comanda Utilizador fecho das portas
Y01	I 126.2	BOOL	Posicao de transporte 1
Y02	I 126.3	BOOL	Posicao de transporte 2
M1	M 1.0	BOOL	
M2	M 1.1	BOOL	
M3	M 1.2	BOOL	
M4	M 1.3	BOOL	
M5	M 1.4	BOOL	
M6	M 1.5	BOOL	
M7	M 1.6	BOOL	
M8	M 1.7	BOOL	
M START	M 2.0	BOOL	
M10	M 2.3	BOOL	
M11	M 2.4	BOOL	
OP CHECKIN	M 50.5	BOOL	
OP CHECKOUT	M 50.6	BOOL	
COM TEST	M 50.7	BOOL	Teste da comunicação com o display
M USERID	MW 50	WORD	User ID do leitor de cartoes
M TOTAL TIME	MW 51	WORD	Totaliza o tempo de uso do sistema
Main Program	OB 1	OB 1	

SIMATIC ...or\CPU 314IFM-CPU\Parque Bicicletas\Symbols 09/21/2011 16:31:35

Symbol	Address	Data type	Comment
Complete Restart	OB 100	OB 100	
UA_WEIGHT	PIW 128	WORD	Leitura do peso da UA
DOOR_OPEN_CMD	Q 124.0	BOOL	Comando de Abertura das Portas
SYSTEM_FULL_ALARM	Q 124.4	BOOL	Lotacao Esgotada
UA_CHK_EMPTY_CMD	Q 124.5	BOOL	Comanda a verificacao para detectar se a UA esta vazia
UA_CONTENT_ALARM	Q 124.6	BOOL	Alarme de conteudo da UA invalido
OPERATION_DONE	Q 124.7	BOOL	Operacao terminada com sucesso
MX_NORMAL	Q 125.0	BOOL	Motor X - Sentido Normal
MX_REVERSE	Q 125.1	BOOL	Motor X - Sentido Reverso
MY_NORMAL	Q 125.2	BOOL	Motor Y - Sentido Normal
MY_REVERSE	Q 125.3	BOOL	Motor Y - Sentido Reverso
MZ_NORMAL	Q 125.4	BOOL	Motor Z - Sentido Normal
MZ_REVERSE	Q 125.5	BOOL	Motor Z - Sentido Reverso
UA_CHK_CONTENT_CMD	Q 125.6	BOOL	Comanda a verificacao do interior da UA
UA_LOCK_CMD	Q 125.7	BOOL	Bloqueia a UA na plataforma do elevador
READ_CLK	SFC 1	SFC 1	Read System Clock

ANEXO II-II

OB1 "MAIN PROGRAM"

SIMATIC ...trolador\CPU 314IFM-CPU\...\OB1 - <offline> 09/21/2011 16:26:38

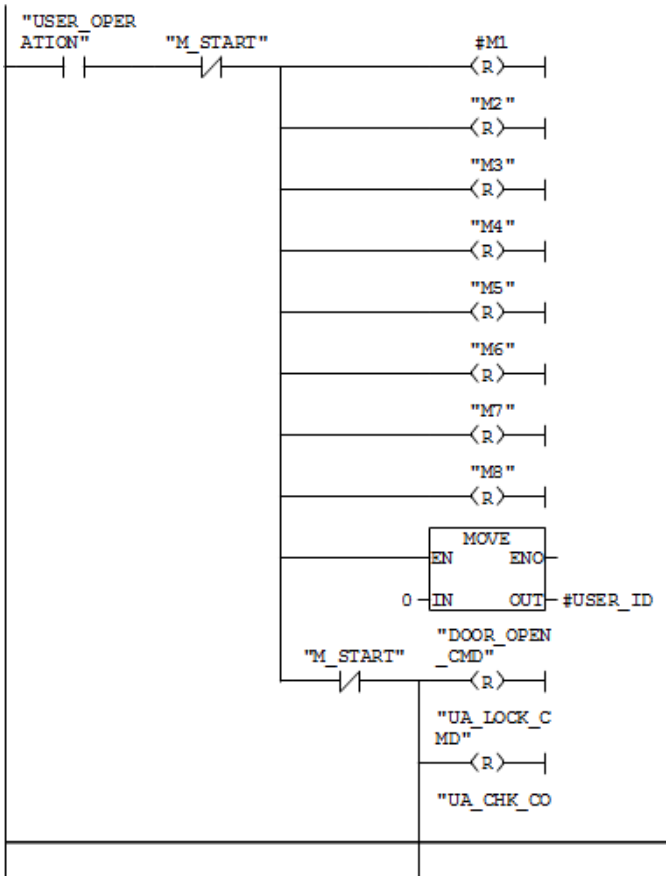
OB1 - <offline>

"Main Program"
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 14:37:45
Interface: 21-09-2011 10:13:11
Lengths (block/logic/data): 00688 00524 00034

Address	Declaration	Name	Type	Initial value	Comment
0.0	temp	OB1_EV_CLASS	BYTE		Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event class 1)
1.0	temp	OB1_SCAN_1	BYTE		1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1)
2.0	temp	OB1_PRIORITY	BYTE		Priority of OB Execution
3.0	temp	OB1_OB_NUMBR	BYTE		1 (Organization block 1, OB1)
4.0	temp	OB1_RESERVED_1	BYTE		Reserved for system
5.0	temp	OB1_RESERVED_2	BYTE		Reserved for system
6.0	temp	OB1_PREV_CYCLE	INT		Cycle time of previous OB1 scan (milliseconds)
8.0	temp	OB1_MIN_CYCLE	INT		Minimum cycle time of OB1 (milliseconds)
10.0	temp	OB1_MAX_CYCLE	INT		Maximum cycle time of OB1 (milliseconds)
12.0	temp	OB1_DATE_TIME	DATE_AND_TIME		Date and time OB1 started
20.0	temp	USER_ID	INT		Memoriza o ID do utilisador actual
22.0	temp	UA_SELECTED	INT		Memoriza a UA seleccionada
24.0	temp	M_USER_NOT_EXIST	BOOL		
26.0	temp	MTIMETEMP	TIME		v temp
30.0	temp	M_END	BOOL		
30.1	temp	M_SEARCH_ID	BOOL		
30.2	temp	M_SEARCH_EMPTY	BOOL		
30.3	temp	M_SYSTEM_FULL	BOOL		
30.4	temp	M1	BOOL		
30.5	temp	RESET	BOOL		

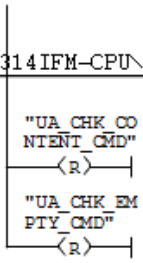
Block: OB1 "Main Program Sweep (Cycle)"

Network: 1 START



Page 1..

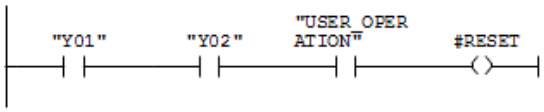
SIMATIC ...trolador\CPU 314IFM-CPU\...\OB1 – <offline> 09/21/2011 16:26:38



Symbol information

I126.0	USER_OPERATION	Comando Utilizador operacao de entrega/recolha
M2.0	M_START	
M1.1	M2	
M1.2	M3	
M1.3	M4	
M1.4	M5	
M1.5	M6	
M1.6	M7	
M1.7	M8	
Q124.0	DOOR_OPEN_CMD	Comando de Abertura das Portas
Q125.7	UA_LOCK_CMD	Bloqueia a UA na plataforma do elevador
Q125.6	UA_CHK_CONTENT_CMD	Comanda a verificacao do interior da UA
Q124.5	UA_CHK_EMPTY_CMD	Comanda a verificacao para detectar se a UA esta vazia

Network: 2 RESET

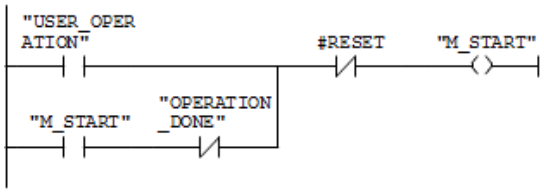


Symbol information

I126.2	Y01	Posicao de transporte 1
I126.3	Y02	Posicao de transporte 2
I126.0	USER_OPERATION	Comando Utilizador operacao de entrega/recolha

Network: 3 Controla a variavel de processo M_START

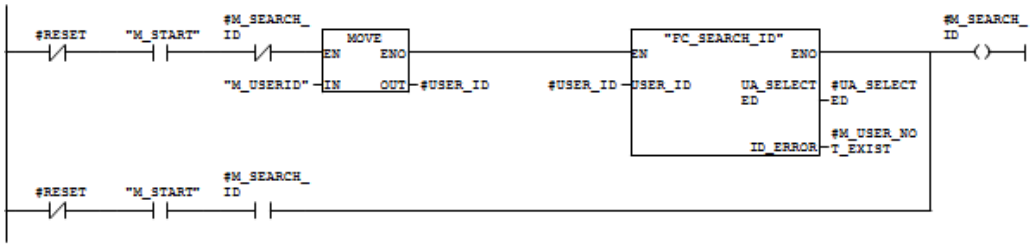
Ao serem pressionados simultaneamento os contactos Y01 e Y02 é feito um reset a variavel M_START



Symbol information

I126.0	USER_OPERATION	Comando Utilizador operacao de entrega/recolha
M2.0	M_START	
Q124.7	OPERATION_DONE	Operacao terminada com sucesso

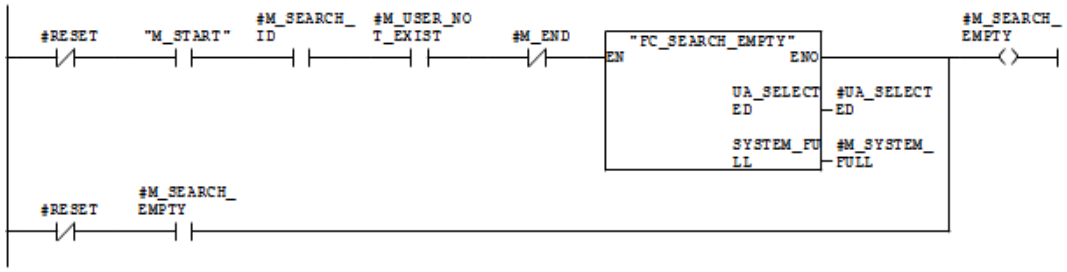
Network: 4 Inicia o processo



SIMATIC ...trolador\CPU 314IFM-CPU\...\OB1 - <offline> 09/21/2011 16:26:38

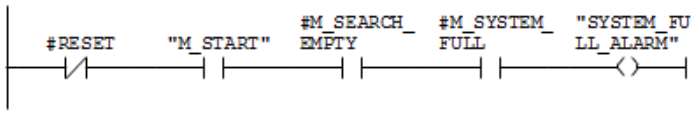
```
Symbol information
M2.0          M_START
MW50          M_USERID          User ID do leitor de cartoes
FC4           FC_SEARCH_ID      Procura a UA associada ao ID
```

Network: 5



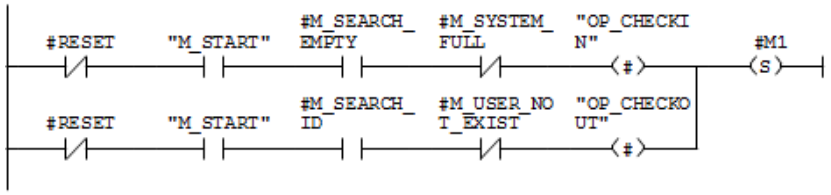

```
Symbol information
M2.0          M_START
FC3           FC_SEARCH_EMPTY    Procura uma UA vazia
```

Network: 6



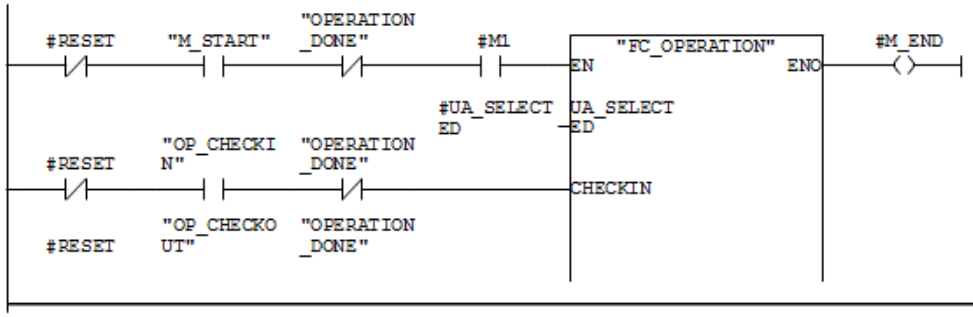

```
Symbol information
M2.0          M_START
Q124.4        SYSTEM_FULL_ALARM  Lotacao Esgotada
```

Network: 7




```
Symbol information
M2.0          M_START
M50.5         OP_CHECKIN
M50.6         OP_CHECKOUT
```

Network: 8



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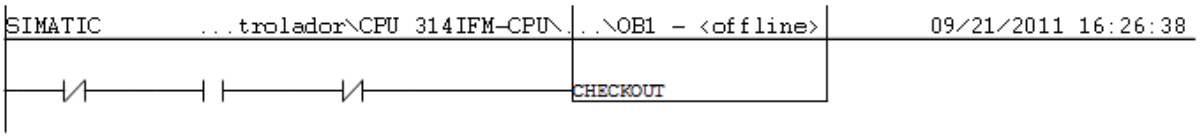
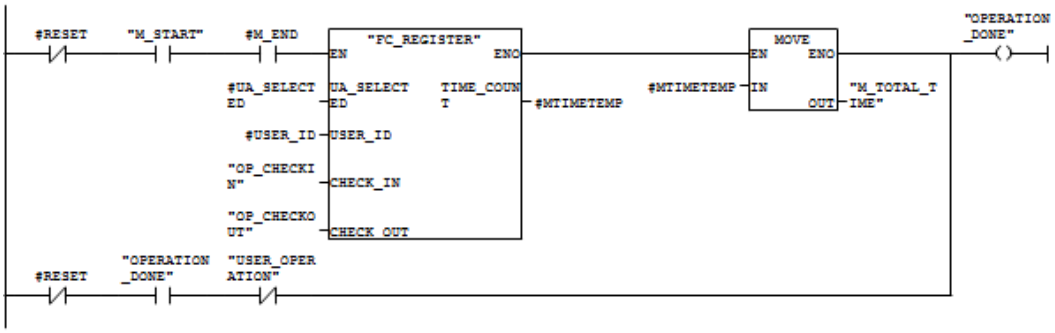


Symbol information

M2.0	M_START	
Q124.7	OPERATION_DONE	Operacao terminada com sucesso
M50.5	OP_CHECKIN	
M50.6	OP_CHECKOUT	
FC9	FC_OPERATION	Cordena a operacao de checkin checkout

Network: 9 END



Symbol information

M2.0	M_START	
FC8	FC_REGISTER	Regista a operacao de check-in/check-out
M50.5	OP_CHECKIN	
M50.6	OP_CHECKOUT	
MW51	M_TOTAL_TIME	Totaliza o tempo de uso do sistema
Q124.7	OPERATION_DONE	Operacao terminada com sucesso
I126.0	USER_OPERATION	Comando Utilizador operacao de entrega/recolha

ANEXO II-III

FC1 “FC_MOTOR_CONTROL”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC1 - <offline> 09/21/2011 16:28:09

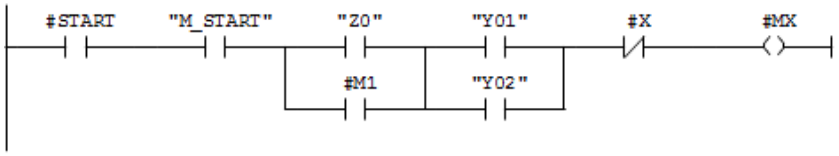
FC1 - <offline>

"FC_MOTOR_CONTROL" Controla o movimento dos motores
Name: Family:
Author: PG Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 10:01:14
Interface: 06-09-2011 15:27:33
Lengths (block/logic/data): 00262 00138 00002

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	X	BOOL		Sensor de X
0.1	in	Y	BOOL		Sensor de Y
0.2	in	Z	BOOL		Sensor de Z
0.3	in	Y0	BOOL		Posicao do Y0
0.4	in	START	BOOL		START
2.0	out	MX	BOOL		Controlo Motor X
2.1	out	MY	BOOL		Controlo Motor Y
2.2	out	MZ	BOOL		Controlo Motor Z
	in_out				
0.0	temp	M1	BOOL		Memoria temporaria

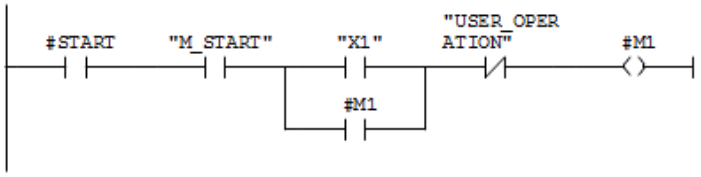
Block: FC1 Controlo dos motores

Network: 1 Controla o motor x



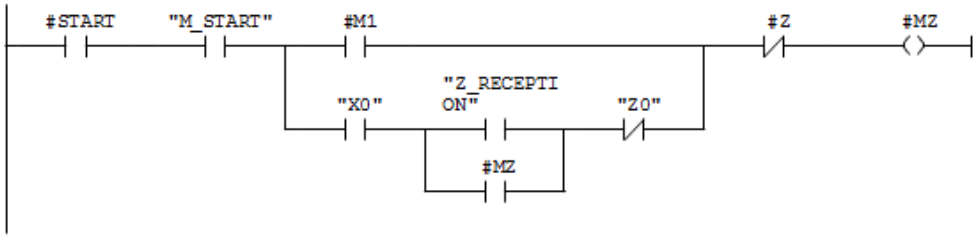
Symbol information
M2.0 M_START
I125.3 Z0
I126.2 Y01 Posicao de transporte 1
I126.3 Y02 Posicao de transporte 2

Network: 2 Activa a memoria M1 ao passar por X1



Symbol information
M2.0 M_START
I124.0 X1
I126.0 USER_OPERATION Comando Utilizador operacao de entrega/recolha

Network: 3 Controla o motor Z



Page 1..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC1 - <offline> 09/21/2011 16:28:09

```
                                    | |


Symbol information
M2.0        M_START
I124.6      X0
I125.5      Z_RECEPTION       Z na zona de recepção e na zona de pesagem
I125.3      Z0

Network: 4      Controla o motor Y

   #START    "M_START"      #X         #Z         #Y         #MY
---| |-------| |----------| |--------| |--------|/|--------( )---|
   |


Symbol information
M2.0        M_START

Network: 5      Fim da funcao

   #START    "M_START"      #X         #Y         #Z
---| |-------| |----------| |--------| |--------| |--------(RET)---|
   |


Symbol information
M2.0        M_START
```

ANEXO II-IV

FC2 “FC_COMPARE”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC2 - <offline> 09/21/2011 16:28:15

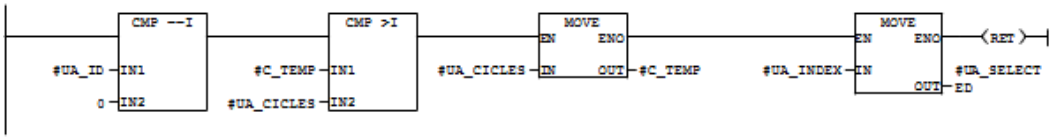
FC2 - <offline>

"FC_COMPARE" Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 12:22:30
Interface: 04-07-2011 14:20:20
Lengths (block/logic/data): 00236 00124 00002

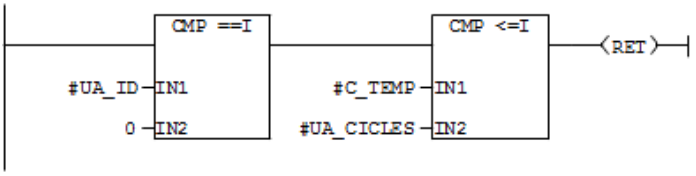
Address	Declaration	Name	Type	Initial value	Comment
0.0	in	UA_ID	INT		Variavel inteira da posicao
2.0	in	UA_CICLES	INT		Numero de ciclos da posicao
4.0	in	UA_INDEX	INT		Indice da posicao
6.0	out	UA_SELECTED	INT		Ultima posicao disponivel
8.0	in_out	C_TEMP	INT		
0.0	temp	M0	BOOL		Memoria temporaria

Block: FC2 Verifica disponibilidade da posicao

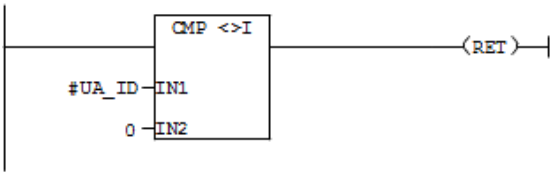
Network: 1 Caso POS_ID=0 e C_TEMP>UA_CICLES



Network: 2 Caso POS_ID=0 e C_TEMP<=UA_CICLES



Network: 3 Caso POS_ID<>0



ANEXO II-V

FC3 “FC_SEARCH_EMPTY”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

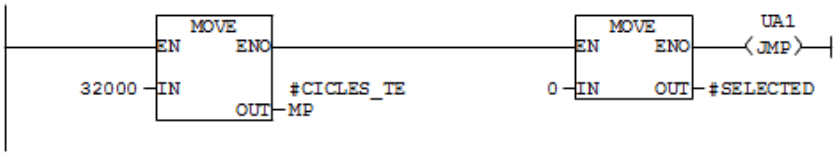
FC3 - <offline>

"FC_SEARCH_EMPTY" Procura uma UA vazia
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 12:29:54
Interface: 29-07-2011 12:03:45
Lengths (block/logic/data): 01954 01744 00012

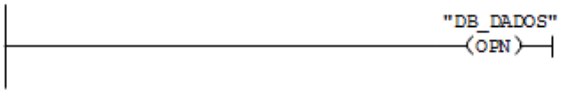
Address	Declaration	Name	Type	Initial value	Comment
	in				
0.0	out	UA_SELECTED	INT		Variavel que devolve o index da posicao que foi seleccionada
2.0	out	SYSTEM_FULL	BOOL		Lotacao Esgotada
	in_out				
0.0	temp	CICLES_TEMP	INT		Variavel temporaria com o valor mais baixo da contagem de ciclos
2.0	temp	SELECTED	INT		Variavel temporaria com a posicao ultima posicao selecionada
4.0	temp	M1	BOOL		Memoria temporaria

Block: FC3 Procura uma UA vazia e com o n ciclos de utilizacao mais baixo

Network: 1 Inicializa as variaveis

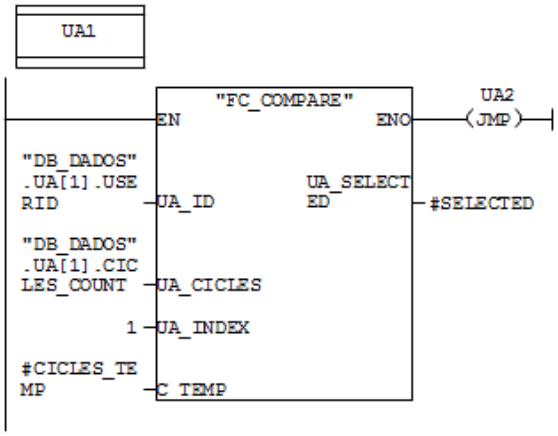


Network: 2 Abre a DB1



Symbol information
DB1 DB_DADOS Guarda o registo dos utilizadores e dos ciclos de utilizacao

Network: 3 UA1



Symbol information

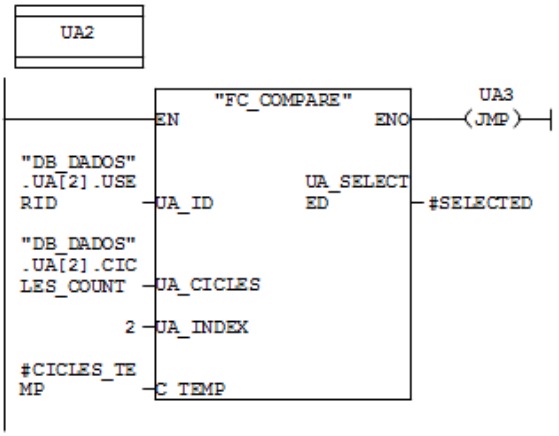
Page 1..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW2	"DB_DADOS".UA[1].USERID	Identificacao do utilizador registado na UA
DB1.DBW4	"DB_DADOS".UA[1].CICLES_COUNT	Registo do numero de ciclos da UA

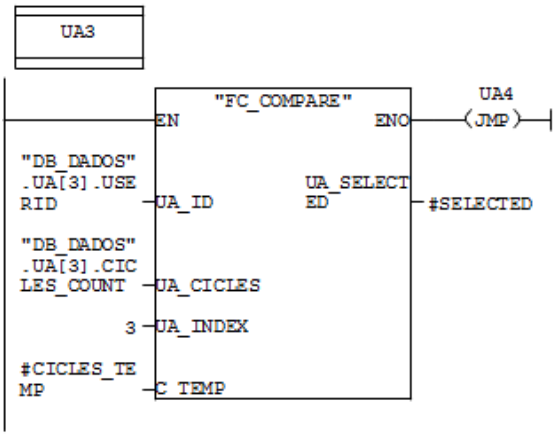
Network: 4 UA2



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW12	"DB_DADOS".UA[2].USERID	Identificacao do utilizador registado na UA
DB1.DBW14	"DB_DADOS".UA[2].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 5 UA2

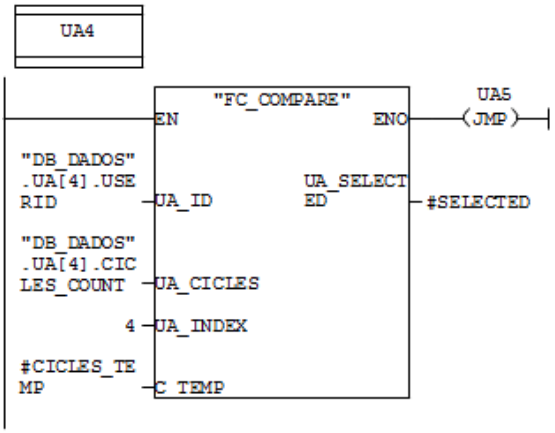


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW22	"DB_DADOS".UA[3].USERID	Identificacao do utilizador registado na UA
DB1.DBW24	"DB_DADOS".UA[3].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

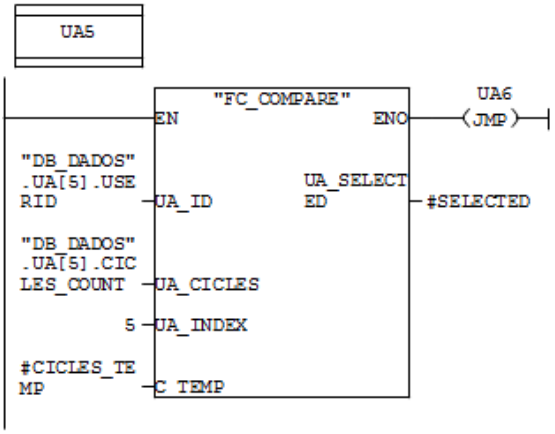
Network: 6 UA2



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW32	"DB_DADOS".UA[4].USERID	Identificacao do utilizador registado na UA
DB1.DBW34	"DB_DADOS".UA[4].CICLES_COUNT	Registo do numero de ciclos da UA

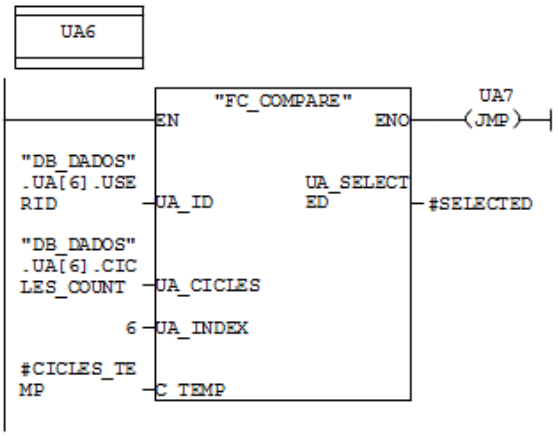
Network: 7 UA5



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW42	"DB_DADOS".UA[5].USERID	Identificacao do utilizador registado na UA
DB1.DBW44	"DB_DADOS".UA[5].CICLES_COUNT	Registo do numero de ciclos da UA

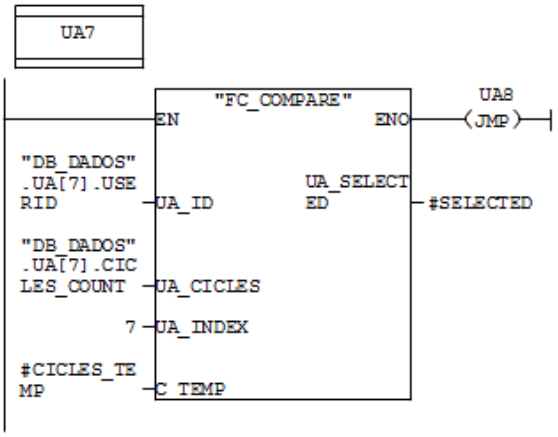
Network: 8 UA6



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW52	"DB_DADOS".UA[6].USERID	Identificacao do utilizador registado na UA
DB1.DBW54	"DB_DADOS".UA[6].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 9 UA7

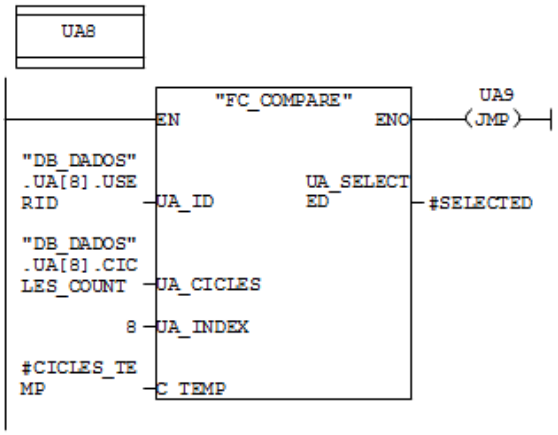


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW62	"DB_DADOS".UA[7].USERID	Identificacao do utilizador registado na UA
DB1.DBW64	"DB_DADOS".UA[7].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

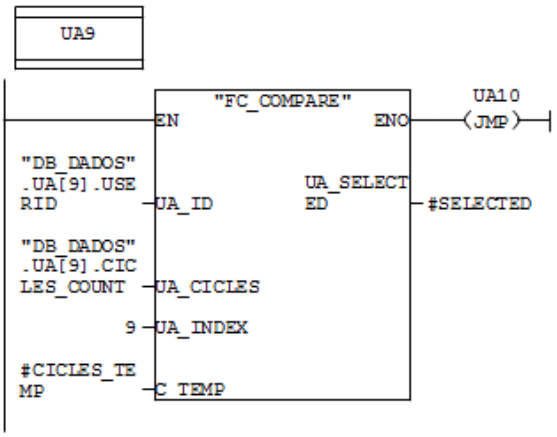
Network: 10 UA8



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW72	"DB_DADOS".UA[8].USERID	Identificacao do utilizador registado na UA
DB1.DBW74	"DB_DADOS".UA[8].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 11 UA9

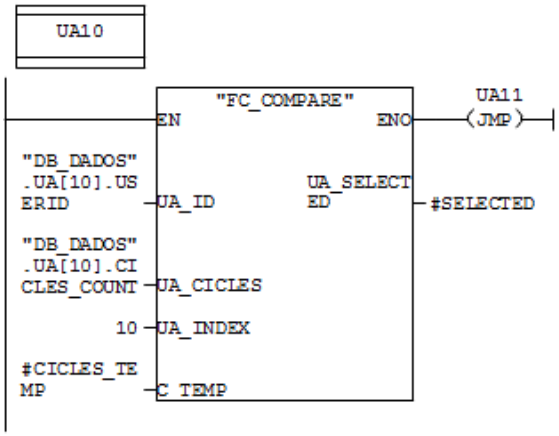


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW82	"DB_DADOS".UA[9].USERID	Identificacao do utilizador registado na UA
DB1.DBW84	"DB_DADOS".UA[9].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

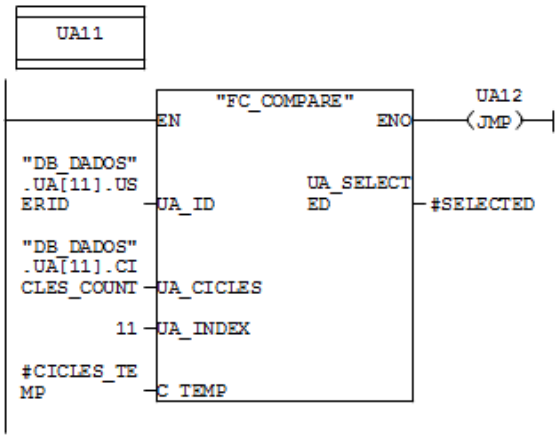
Network: 12 UA10



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW92	"DB_DADOS".UA[10].USERID	Identificacao do utilizador registado na UA
DB1.DBW94	"DB_DADOS".UA[10].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 13 UA11

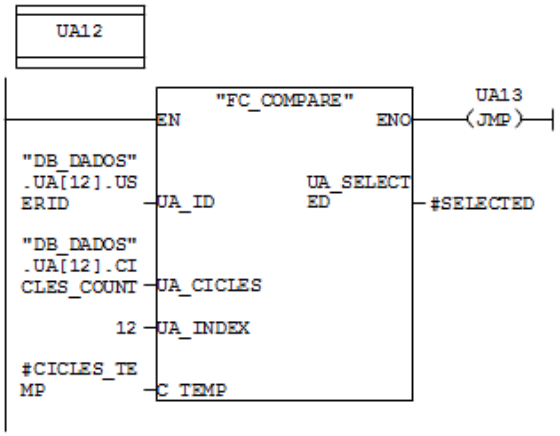


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW102	"DB_DADOS".UA[11].USERID	Identificacao do utilizador registado na UA
DB1.DBW104	"DB_DADOS".UA[11].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

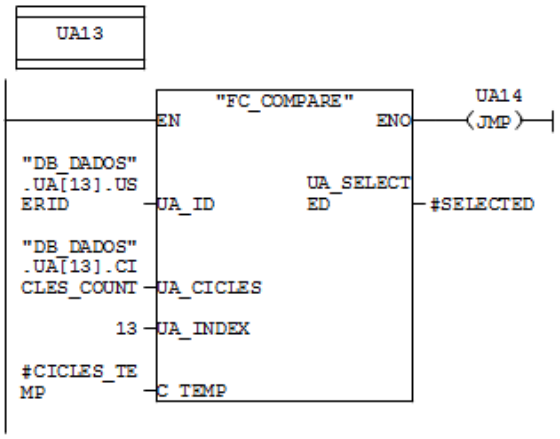
Network: 14 UA12



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW112	"DB_DADOS".UA[12].USERID	Identificacao do utilizador registado na UA
DB1.DBW114	"DB_DADOS".UA[12].CICLES_COUNT	Registo do numero de ciclos da UA

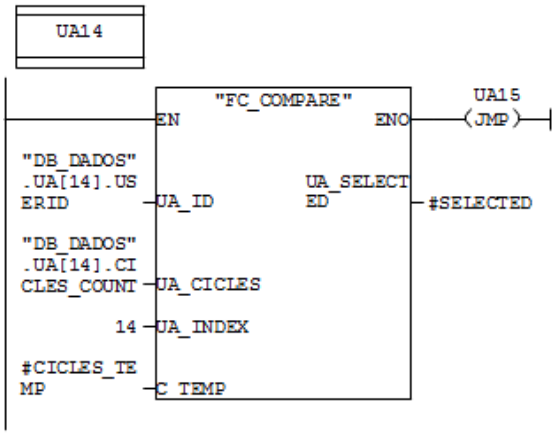
Network: 15 UA13



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW122	"DB_DADOS".UA[13].USERID	Identificacao do utilizador registado na UA
DB1.DBW124	"DB_DADOS".UA[13].CICLES_COUNT	Registo do numero de ciclos da UA

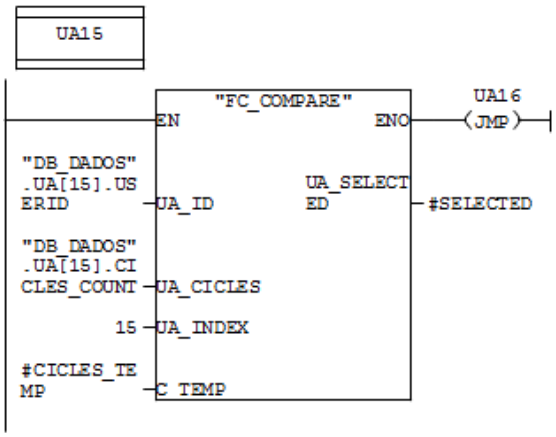
Network: 16 UA14



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW132	"DB_DADOS".UA[14].USERID	Identificacao do utilizador registado na UA
DB1.DBW134	"DB_DADOS".UA[14].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 17 UA15

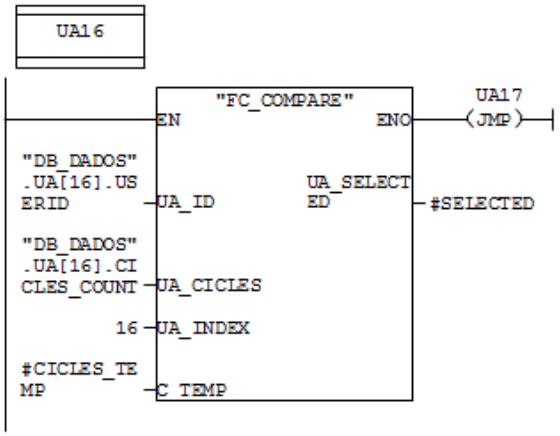


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW142	"DB_DADOS".UA[15].USERID	Identificacao do utilizador registado na UA
DB1.DBW144	"DB_DADOS".UA[15].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

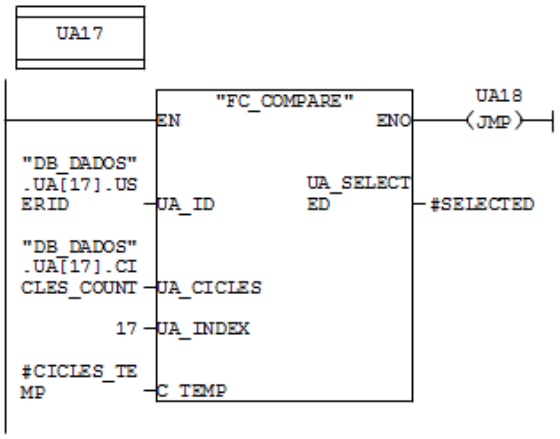
Network: 18 UA16



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW152	"DB_DADOS".UA[16].USERID	Identificacao do utilizador registado na UA
DB1.DBW154	"DB_DADOS".UA[16].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 19 UA17

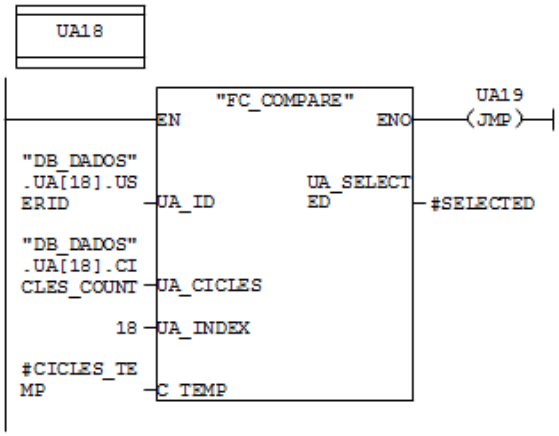


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW162	"DB_DADOS".UA[17].USERID	Identificacao do utilizador registado na UA
DB1.DBW164	"DB_DADOS".UA[17].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

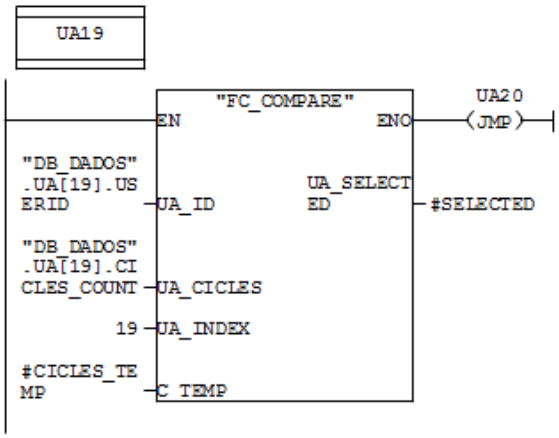
Network: 20 UA18



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW172	"DB_DADOS".UA[18].USERID	Identificacao do utilizador registado na UA
DB1.DBW174	"DB_DADOS".UA[18].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 21 UA19

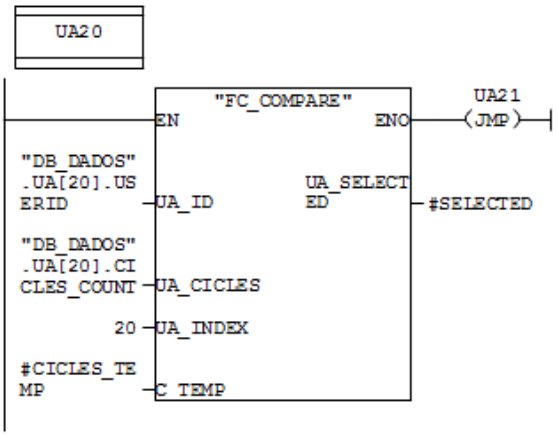


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW182	"DB_DADOS".UA[19].USERID	Identificacao do utilizador registado na UA
DB1.DBW184	"DB_DADOS".UA[19].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

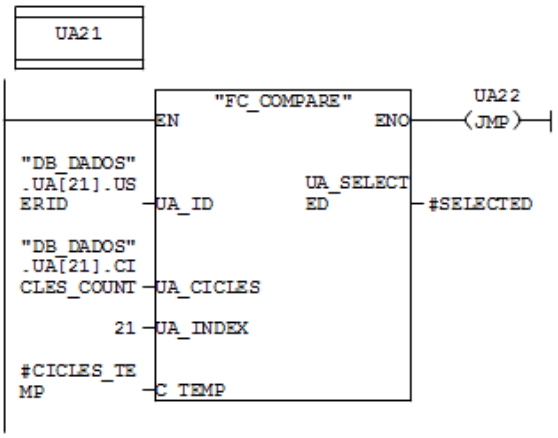
Network: 22 UA20



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW192	"DB_DADOS".UA[20].USERID	Identificacao do utilizador registado na UA
DB1.DBW194	"DB_DADOS".UA[20].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 23 UA21

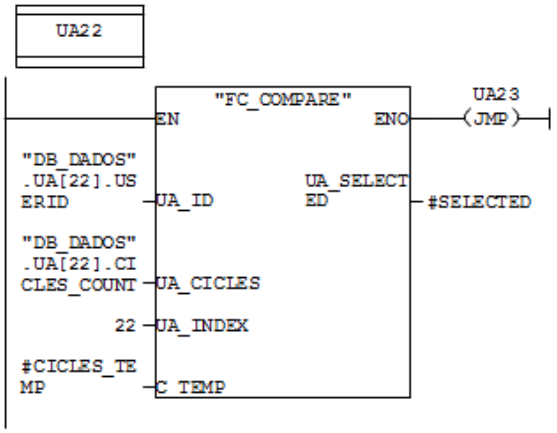


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW202	"DB_DADOS".UA[21].USERID	Identificacao do utilizador registado na UA
DB1.DBW204	"DB_DADOS".UA[21].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

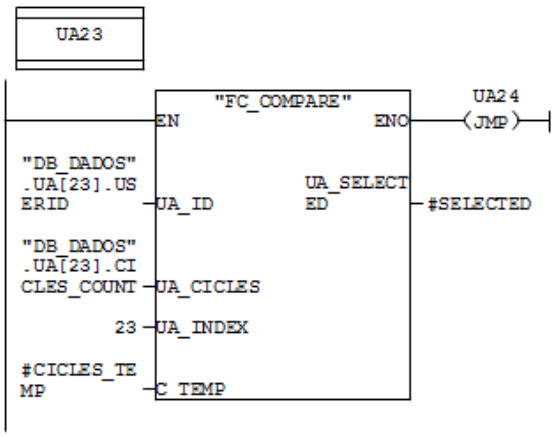
Network: 24 UA22



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW212	"DB_DADOS".UA[22].USERID	Identificacao do utilizador registado na UA
DB1.DBW214	"DB_DADOS".UA[22].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 25 UA23

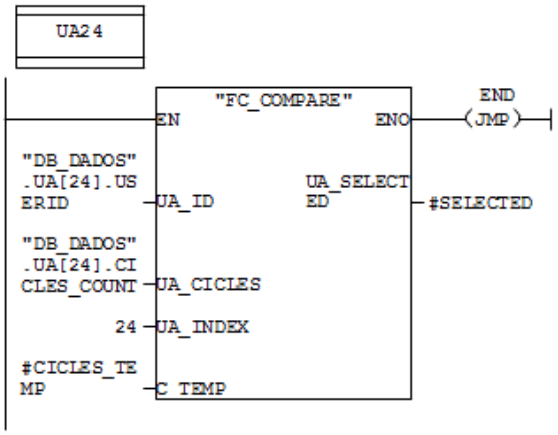


Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW222	"DB_DADOS".UA[23].USERID	Identificacao do utilizador registado na UA
DB1.DBW224	"DB_DADOS".UA[23].CICLES_COUNT	Registo do numero de ciclos da UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC3 - <offline> 09/21/2011 16:28:19

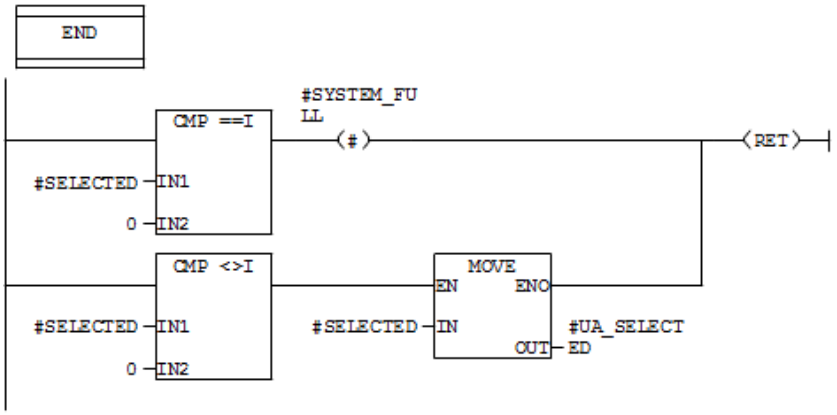
Network: 26 UA24



Symbol information

FC2	FC_COMPARE	Verifica se a posicao esta vazia e devolve a sua contagem de ciclos
DB1.DBW232	"DB_DADOS".UA[24].USERID	Identificacao do utilizador registado na UA
DB1.DBW234	"DB_DADOS".UA[24].CICLES_COUNT	Registo do numero de ciclos da UA

Network: 27 END



ANEXO II-VI

FC4 “FC_SEARCH_ID”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC4 - <offline> 09/21/2011 16:28:24

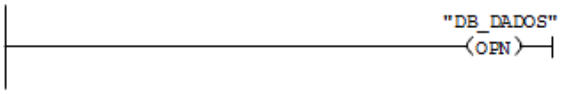
FC4 - <offline>

"FC_SEARCH_ID" Procura a UA associada ao ID
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 12:34:08
Interface: 06-07-2011 15:06:07
Lengths (block/logic/data): 01102 00834 00008

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	USER_ID	INT		Identificacao do utilizador
2.0	out	UA_SELECTED	INT		UA Seleccionada
4.0	out	ID_ERROR	BOOL		Sinaliza um erro caso o utilizador nao existe na DB
	in_out				
0.0	temp	M1	BOOL		Memoria temporaria
0.1	temp	M2	BOOL		Memoria temporaria
2.0	temp	SELECT_TEMP	INT		Memoria temporaria
4.0	temp	M_UA	ARRAY[1..24]		Vector com marcacao das posicoes ocupadas
*0.1	temp		BOOL		

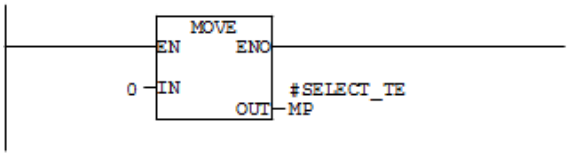
Block: FC4 Procura a UA associada ao ID do utilizador

Network: 1 START DATABASE

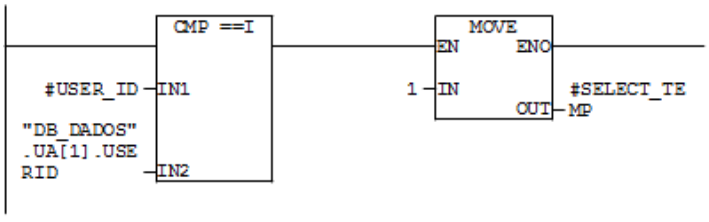


Symbol information
DB1 DB_DADOS Guarda o registo dos utilizadores e dos ciclos de utilizacao

Network: 2

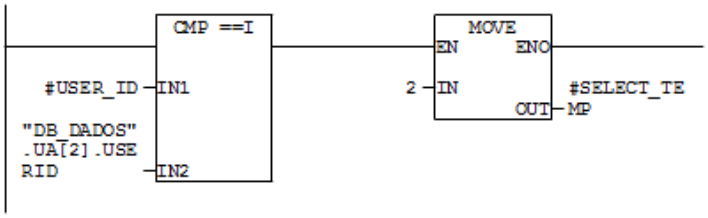


Network: 3 UA1



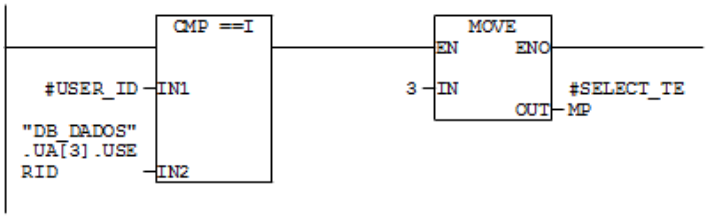
Symbol information
DB1.DBW2 "DB_DADOS".UA[1].USERIDIdentificacao do utilizador registado na UA

Network: 4 UA2



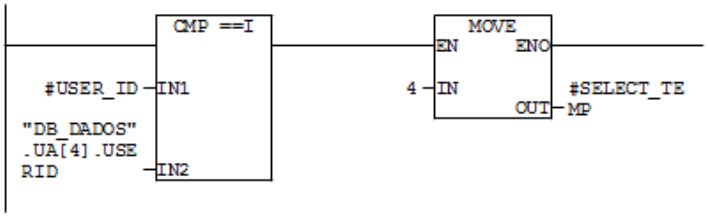
Symbol information
DB1.DBW12 "DB_DADOS".UA[2].USERIDIdentificacao do utilizador registado na UA

Network: 5 UA3



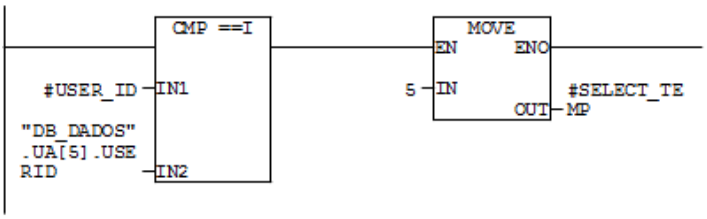
Symbol information
DB1.DBW22 "DB_DADOS".UA[3].USERIDIdentificacao do utilizador registado na UA

Network: 6 UA4



Symbol information
DB1.DBW32 "DB_DADOS".UA[4].USERIDIdentificacao do utilizador registado na UA

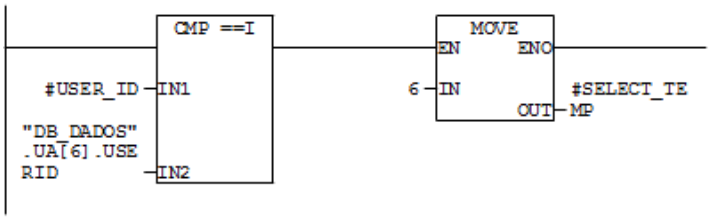
Network: 7 UA5



Symbol information
DB1.DBW42 "DB_DADOS".UA[5].USERIDIdentificacao do utilizador registado na UA

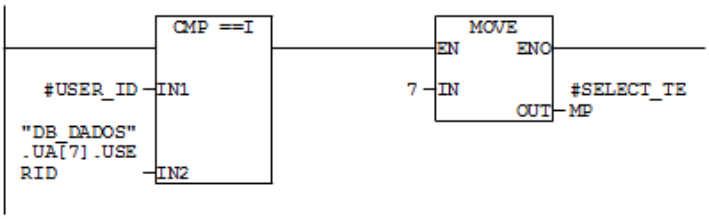
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC4 - <offline> 09/21/2011 16:28:24

Network: 8 UA6



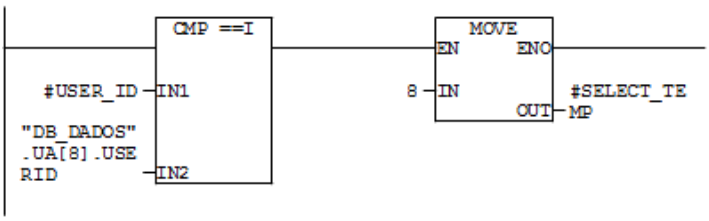
Symbol information
DB1.DBW52 "DB_DADOS".UA[6].USERIDIdentificacao do utilizador registado na UA

Network: 9 UA7



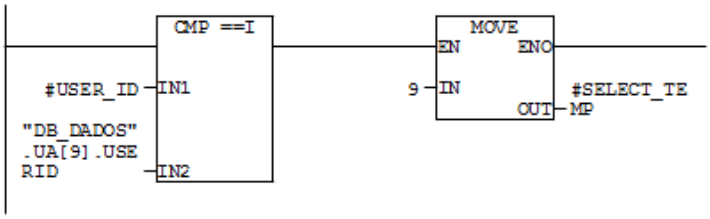
Symbol information
DB1.DBW62 "DB_DADOS".UA[7].USERIDIdentificacao do utilizador registado na UA

Network: 10 UA8



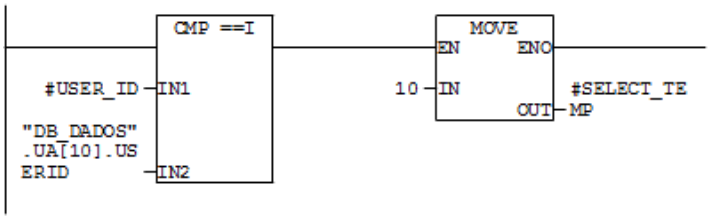
Symbol information
DB1.DBW72 "DB_DADOS".UA[8].USERIDIdentificacao do utilizador registado na UA

Network: 11 UA9



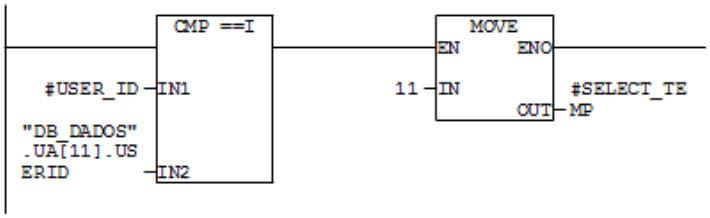
Symbol information
DB1.DBW82 "DB_DADOS".UA[9].USERIDIdentificacao do utilizador registado na UA

Network: 12 UA10



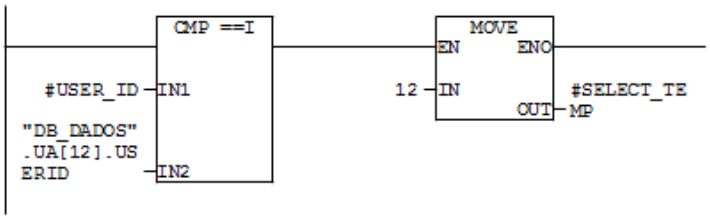
Symbol information
DB1.DBW92 "DB_DADOS".UA[10].USERIDIdentificacao do utilizador registado na UA

Network: 13 UA11



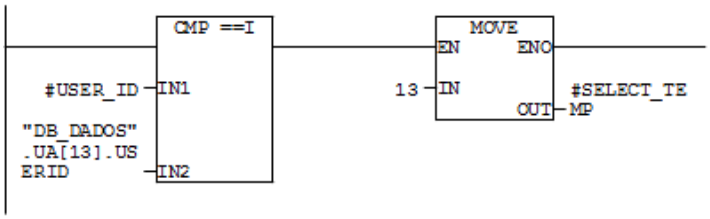
Symbol information
DB1.DBW102 "DB_DADOS".UA[11].USERIDIdentificacao do utilizador registado na UA

Network: 14 UA12



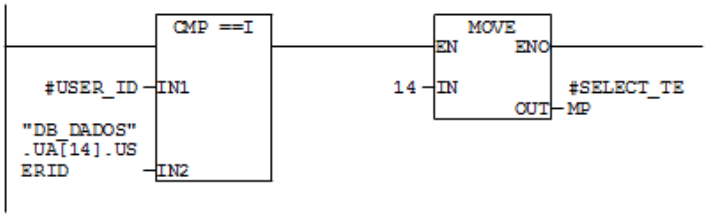
Symbol information
DB1.DBW112 "DB_DADOS".UA[12].USERIDIdentificacao do utilizador registado na UA

Network: 15 UA13



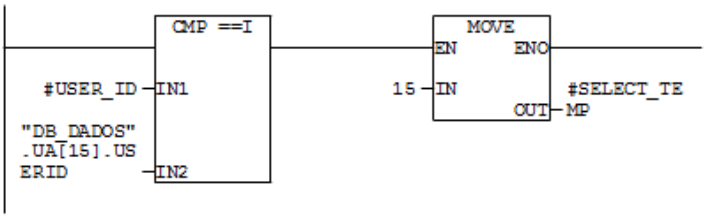
Symbol information
DB1.DBW122 "DB_DADOS".UA[13].USERIDIdentificacao do utilizador registado na UA

Network: 16 UA14



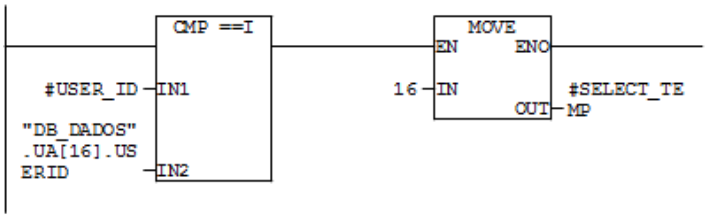
Symbol information
DB1.DBW132 "DB_DADOS".UA[14].USERIDIdentificacao do utilizador registado na UA

Network: 17 UA15



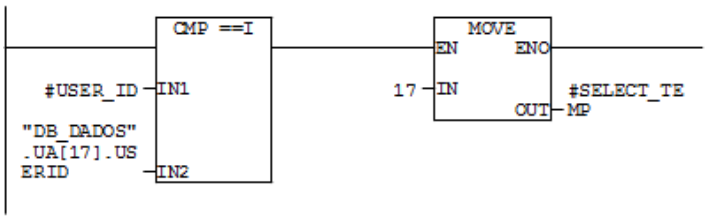
Symbol information
DB1.DBW142 "DB_DADOS".UA[15].USERIDIdentificacao do utilizador registado na UA

Network: 18 UA16



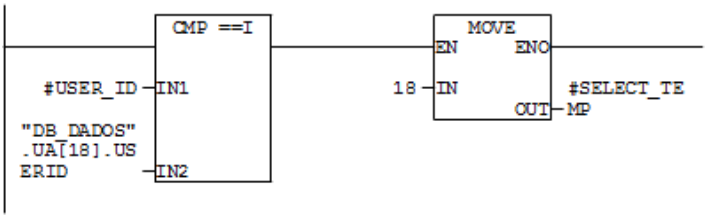
Symbol information
DB1.DBW152 "DB_DADOS".UA[16].USERIDIdentificacao do utilizador registado na UA

Network: 19 UA17



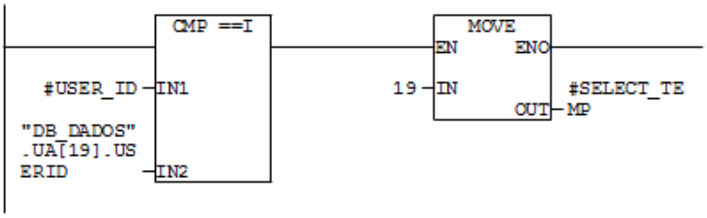
Symbol information
DB1.DBW162 "DB_DADOS".UA[17].USERIDIdentificacao do utilizador registado na UA

Network: 20 UA18



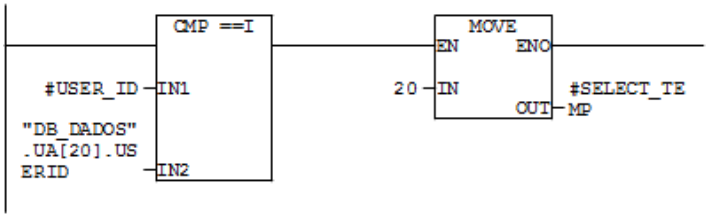
Symbol information
DB1.DBW172 "DB_DADOS".UA[18].USERIDIdentificacao do utilizador registado na UA

Network: 21 UA19



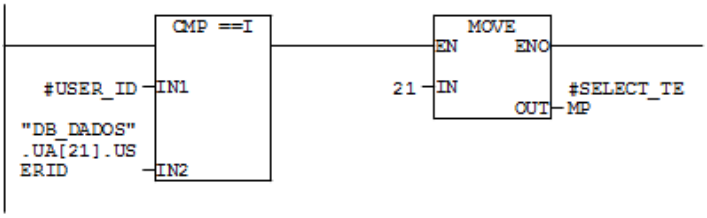
Symbol information
DB1.DBW182 "DB_DADOS".UA[19].USERIDIdentificacao do utilizador registado na UA

Network: 22 UA20



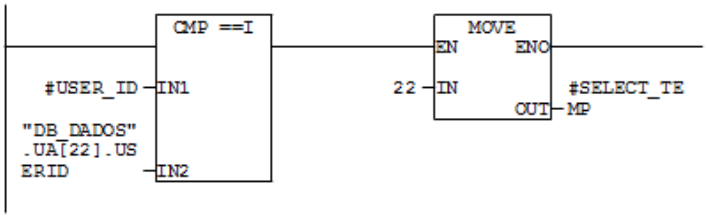
Symbol information
DB1.DBW192 "DB_DADOS".UA[20].USERIDIdentificacao do utilizador registado na UA

Network: 23 UA21



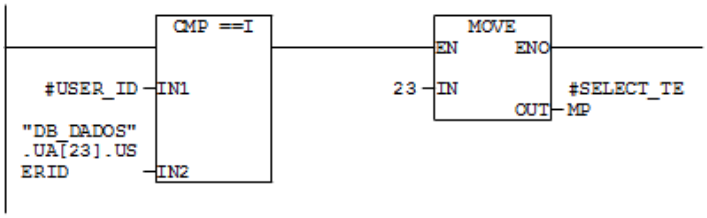
Symbol information
DB1.DBW202 "DB_DADOS".UA[21].USERIDIdentificacao do utilizador registado na UA

Network: 24 UA22



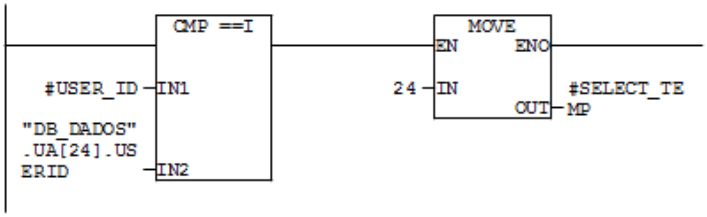
Symbol information
DB1.DBW212 "DB_DADOS".UA[22].USERIDIdentificacao do utilizador registado na UA

Network: 25 UA23



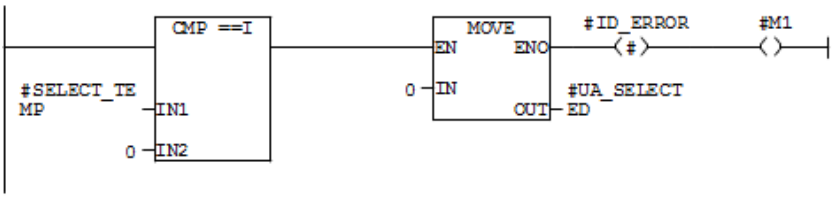
Symbol information
DB1.DBW222 "DB_DADOS".UA[23].USERIDIdentificacao do utilizador registado na UA

Network: 26 UA24



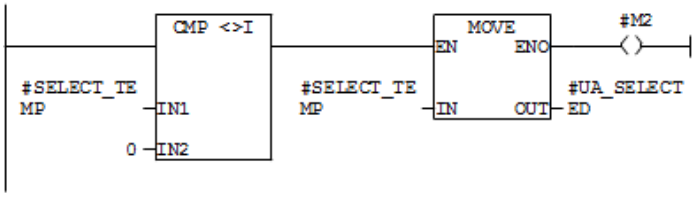
Symbol information
DB1.DBW232 "DB_DADOS".UA[24].USERIDIdentificacao do utilizador registado na UA

Network: 27 ERROR

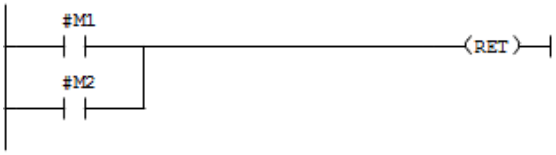


SIMATIC ...trolador\CPU 314IFM-CPU\...\FC4 - <offline> 09/21/2011 16:28:24

Network: 28 SEARCH OK



Network: 29



Page 8

ANEXO II-VII

FC5 “FC_GO_POSITION”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

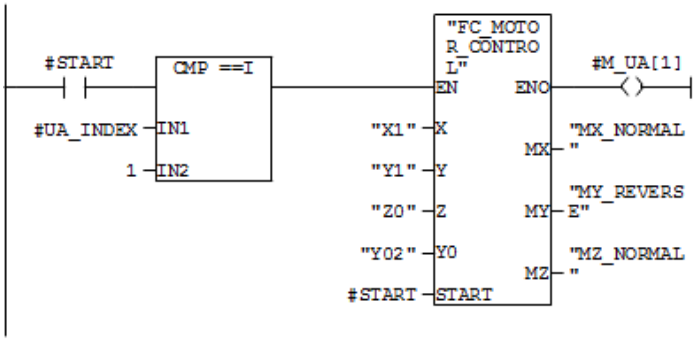
FC5 - <offline>

"FC_GO_POSITION" Funcao que cordena o movimento do MA para a ZER
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 07-09-2011 17:35:56
Interface: 07-09-2011 17:35:56
Lengths (block/logic/data): 03140 02886 00008

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	UA_INDEX	INT		Index da UA objectivo
2.0	in	START	BOOL		START
	out				
	in_out				
0.0	temp	M_TEMP	BOOL		
0.1	temp	MPOS1	BOOL		Memoria temporaria
2.0	temp	M_UA	ARRAY[1..24]		Vector posicoes
*0.1	temp		BOOL		

Block: FC5 Funcao que cordena os movimentos do robo HOME->POSICAO

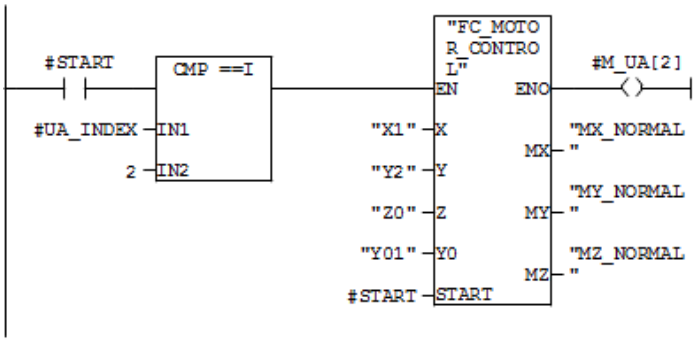
Network: 1 UA1



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.0	X1	
I125.6	Y1	
I125.3	Z0	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 2 UA2

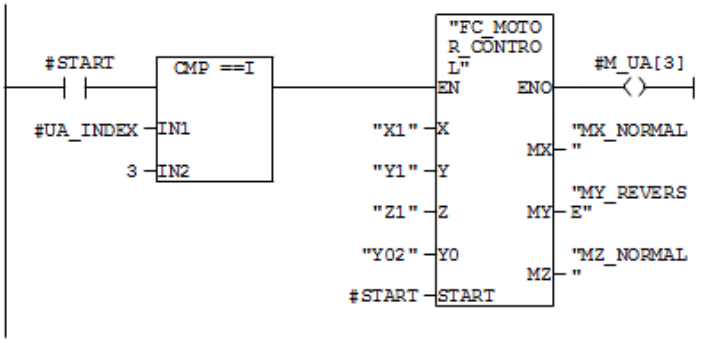


SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.0	X1	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

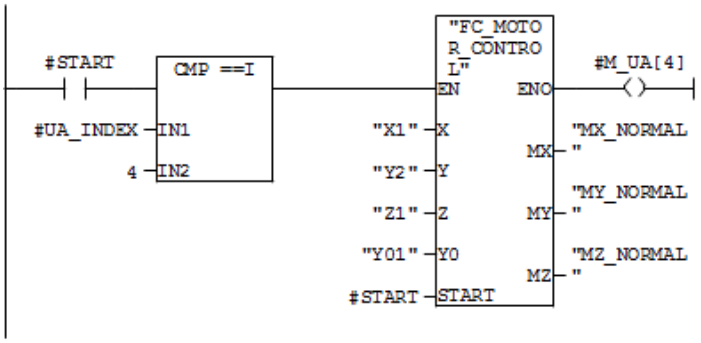
Network: 3 UA3



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.0	X1	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 4 UA4

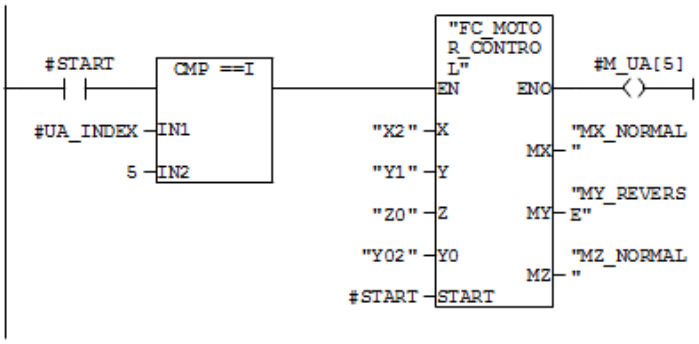


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.0	X1	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

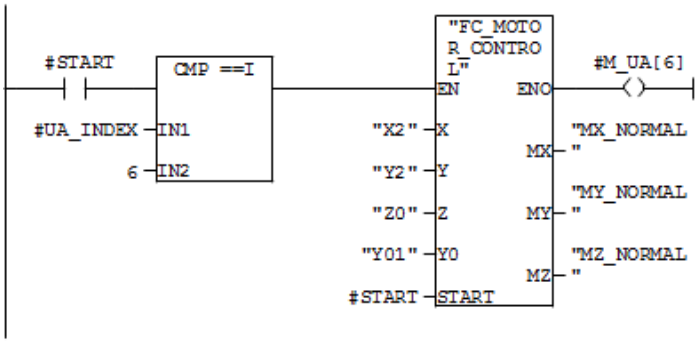
Network: 5 UA5



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.1	X2	
I125.6	Y1	
I125.3	Z0	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 6 UA6

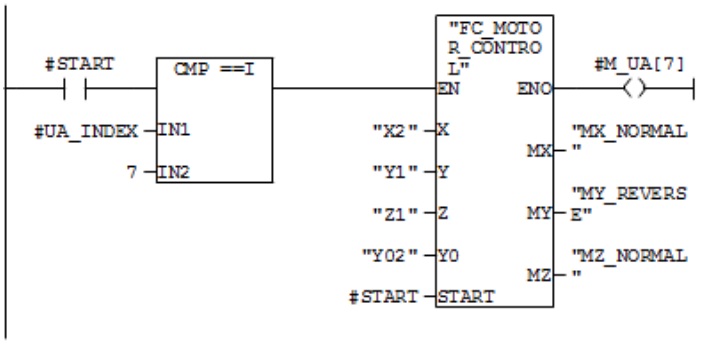


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.1	X2	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

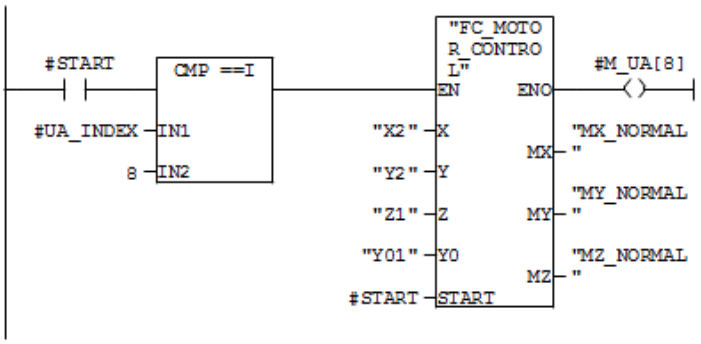
Network: 7 UA7



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.1	X2	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 8 UA8

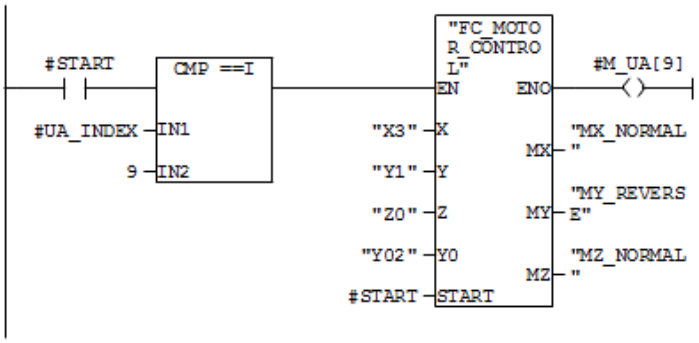


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.1	X2	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

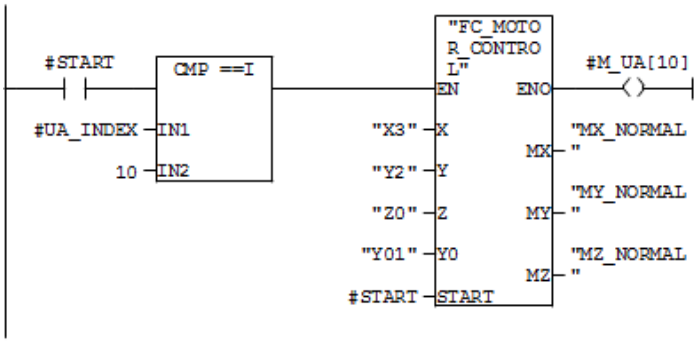
Network: 9 UA9



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.2	X3	
I125.6	Y1	
I125.3	Z0	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 10 UA10

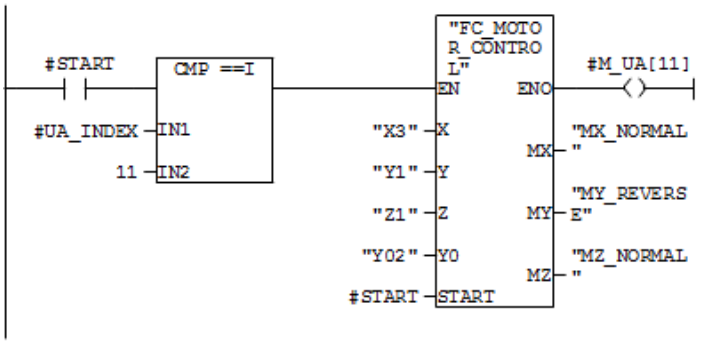


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.2	X3	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

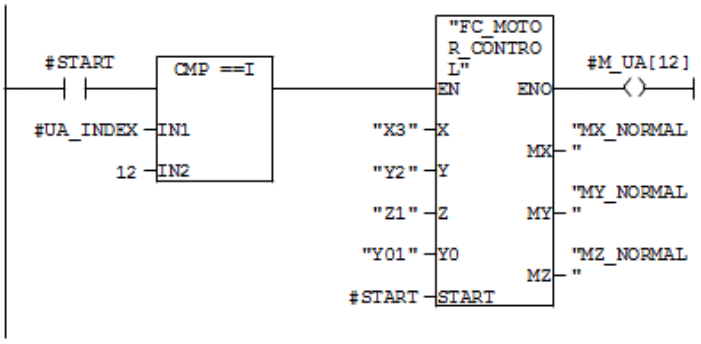
Network: 11 UA11



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.2	X3	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 12 UA12

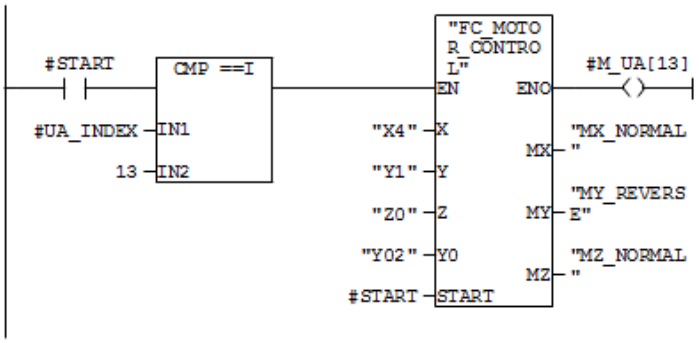


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.2	X3	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

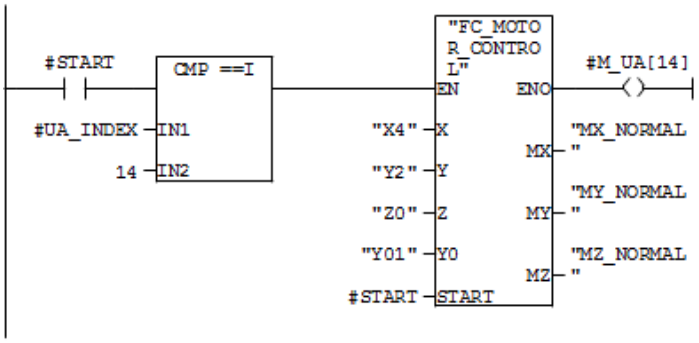
Network: 13 UA13



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.3	X4	
I125.6	Y1	
I125.3	Z0	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 14 UA14

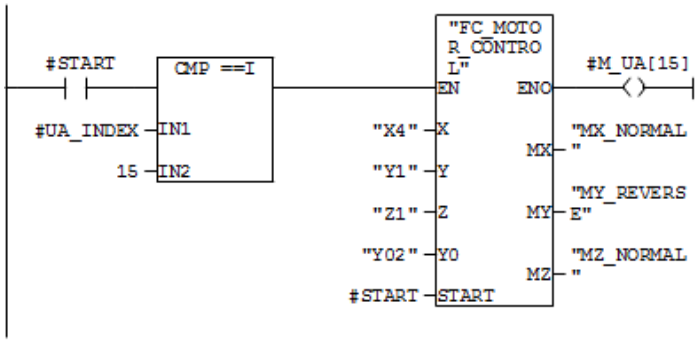


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.3	X4	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

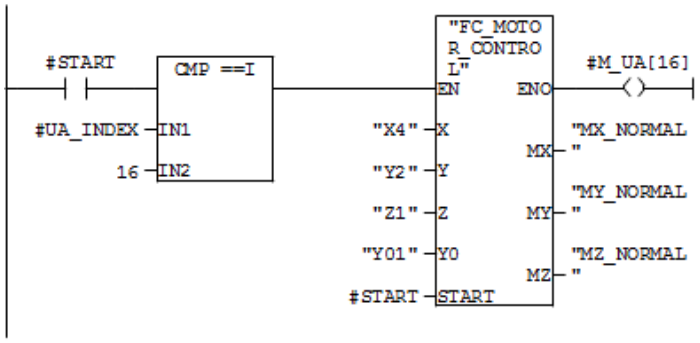
Network: 15 UA15



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.3	X4	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

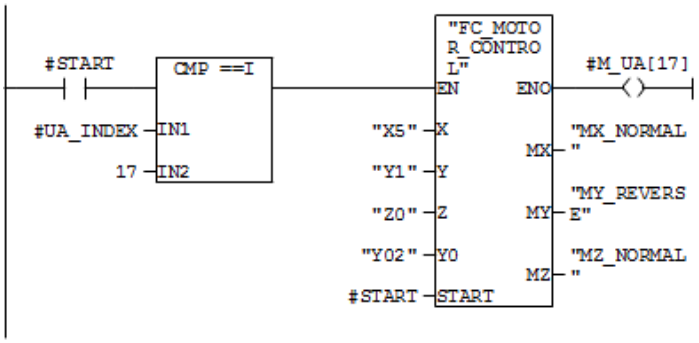
Network: 16 UA16



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.3	X4	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

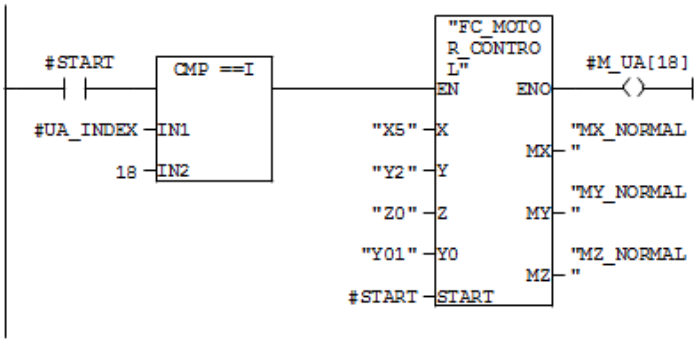
Network: 17 UA17



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.4	X5	
I125.6	Y1	
I125.3	Z0	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

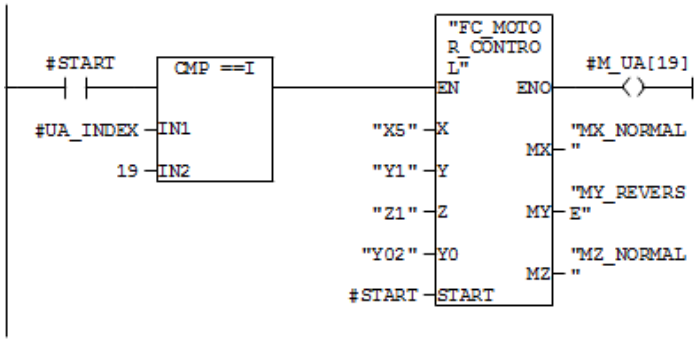
Network: 18 UA18



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.4	X5	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

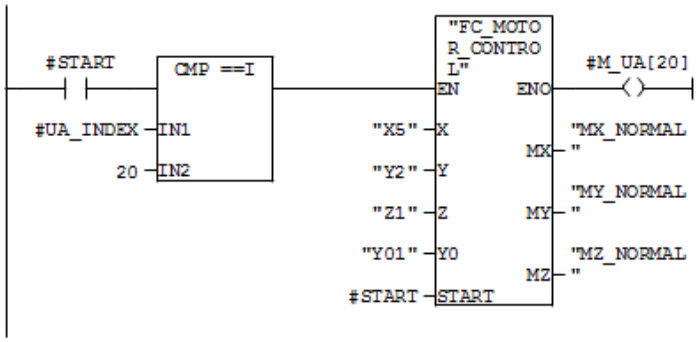
Network: 19 UA19



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.4	X5	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

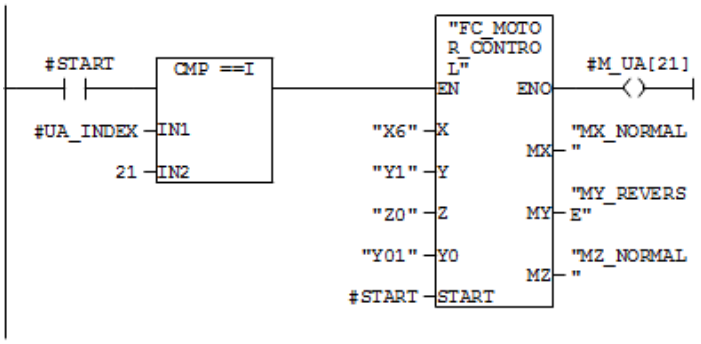
Network: 20 UA20



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.4	X5	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

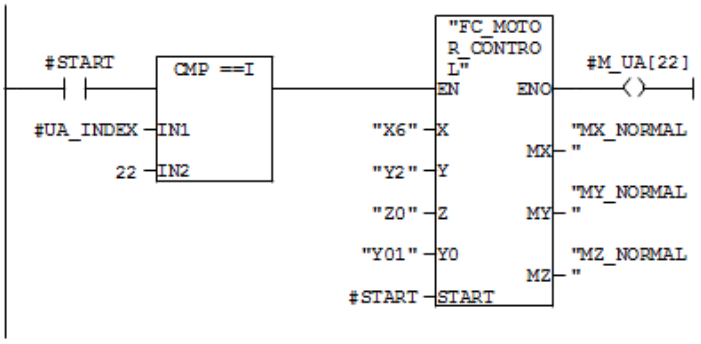
Network: 21 UA21



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.5	X6	
I125.6	Y1	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 22 UA22

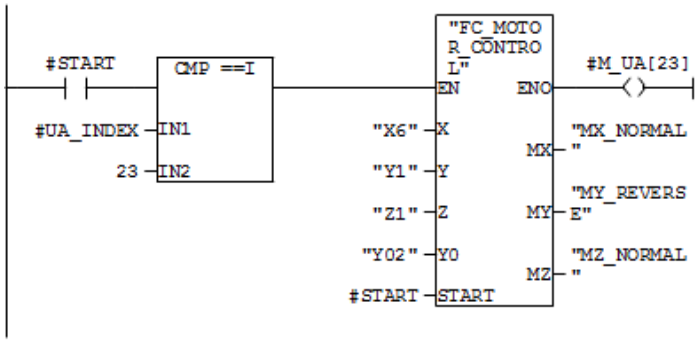


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.5	X6	
I125.7	Y2	
I125.3	Z0	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

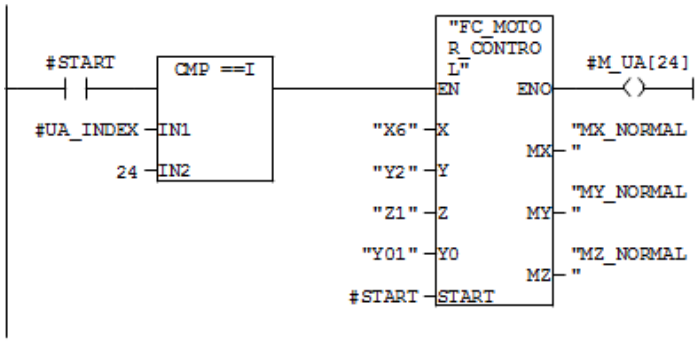
Network: 23 UA23



Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.5	X6	
I125.6	Y1	
I125.4	Z1	
I126.3	Y02	Posicao de transporte 2
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

Network: 24 UA24

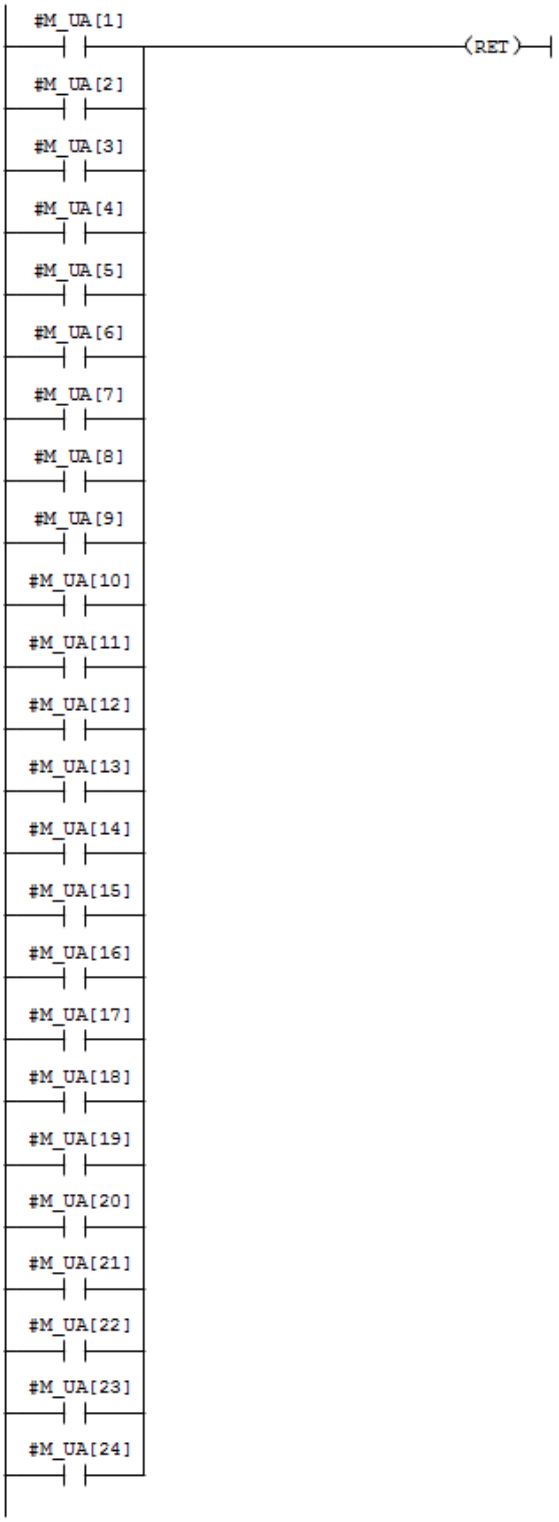


Symbol information

FC1	FC_MOTOR_CONTROL	Controla o movimento dos motores
I124.5	X6	
I125.7	Y2	
I125.4	Z1	
I126.2	Y01	Posicao de transporte 1
Q125.0	MX_NORMAL	Motor X - Sentido Normal
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
Q125.4	MZ_NORMAL	Motor Z - Sentido Normal

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC5 - <offline> 09/21/2011 16:28:31

Network: 25 Fim



ANEXO II-VIII

FC6 “FC_GO_HOME”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC6 - <offline> 09/21/2011 16:28:36

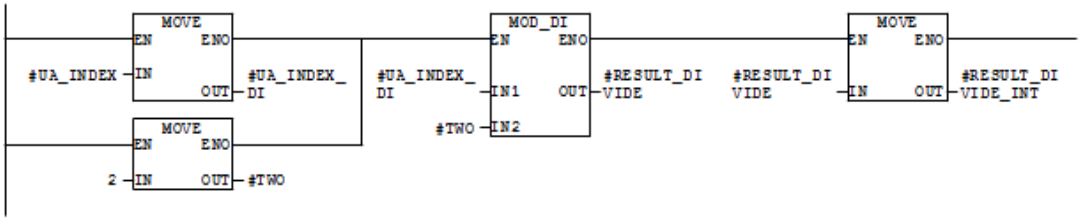
FC6 - <offline>

"FC_GO_HOME" Funcao que cordena o movimento do robo para a posicao HOME
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 08-09-2011 15:56:49
Interface: 06-09-2011 16:27:06
Lengths (block/logic/data): 00402 00266 00018

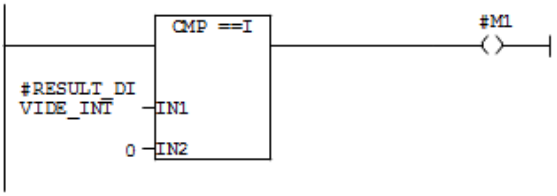
Address	Declaration	Name	Type	Initial value	Comment
0.0	in	GOHOME	BOOL		Inicia o processo de ida até a posicao d e repouso do robo
0.1	in	GORECEPTION	BOOL		Coloca o robo em posicao de pesagem da U A
2.0	in	UA_INDEX	INT		Index da UA
	out				
	in_out				
0.0	temp	M1	BOOL		Memoria Temporaria
0.1	temp	Y0	BOOL		Posicao do home
2.0	temp	UA_INDEX_DI	DINT		memoria temporaria
6.0	temp	TWO	DINT		Memoria temporaria
10.0	temp	RESULT_DIVIDE	DINT		Memoria tmeporaria
14.0	temp	RESULT_DIVIDE_INT	INT		

Block: FC6 Funcao que cordena os movimentos do robo ate a posicao HOME

Network: 1 Verifica se o indice da posicao e par ou impar

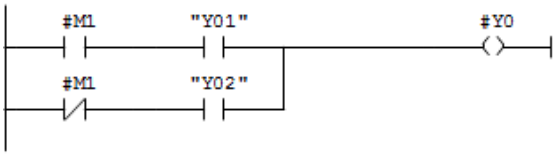


Network: 2 Compara o resto da divisao para ver se e zero



Network: 3

Se o indice da UA for par a posicao da transporte e y02, se for impar e y01

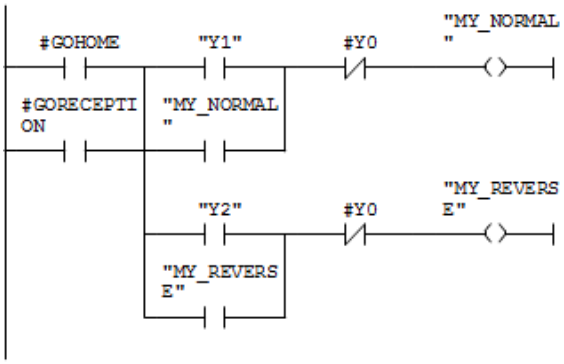


Symbol information

I126.2	Y01	Posicao de transporte 1
I126.3	Y02	Posicao de transporte 2

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC6 - <offline> 09/21/2011 16:28:36

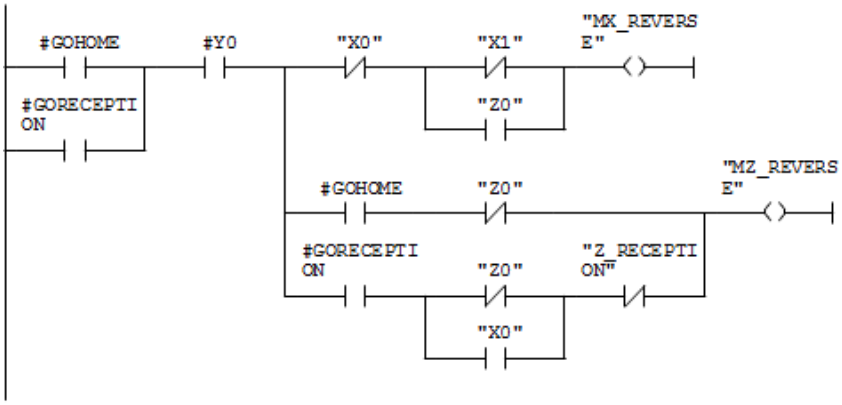
Network: 4 controla o motor y



Symbol information

I125.6	Y1	
Q125.2	MY_NORMAL	Motor Y - Sentido Normal
I125.7	Y2	
Q125.3	MY_REVERSE	Motor Y - Sentido Reverso

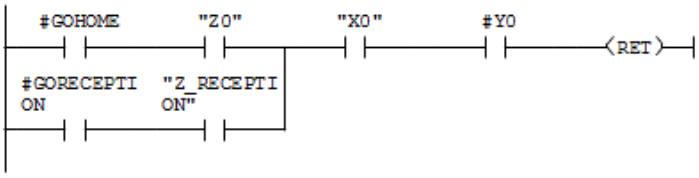
Network: 5 Controla o motor x e z quando é atingido y0



Symbol information

I124.6	X0	
I124.0	X1	
I125.3	Z0	
Q125.1	MX_REVERSE	Motor X - Sentido Reverso
I125.5	Z_RECEPTION	Z na zona de recepção e na zona de pesagem
Q125.5	MZ_REVERSE	Motor Z - Sentido Reverso

Network: 6 Termina a funcao



Symbol information

I125.3	Z0	
I125.5	Z_RECEPTION	Z na zona de recepção e na zona de pesagem

Page 2..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC6 - <offline> 09/21/2011 16:28:36

I124.6 X0

ANEXO II-IX

FC7 “FC_CHECK”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC7 - <offline> 09/21/2011 16:28:40

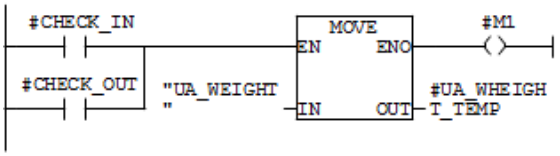
FC7 - <offline>

"FC_CHECK" Verifica o conteudo da UA
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 08-09-2011 19:49:09
Interface: 08-09-2011 12:01:23
Lengths (block/logic/data): 00360 00234 00004

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	CHECK_IN	BOOL		Operacao de CheckIn
0.1	in	CHECK_OUT	BOOL		Operacao de CheckOut
2.0	out	OK	BOOL		Conteudo Aceite
2.1	out	FAIL	BOOL		Conteudo Rejeitado
	in out				
0.0	temp	UA_WHEIGHT_TEMP	INT		Leitura temporaria do peso da UA
2.0	temp	M1	BOOL		Memoria Temporaria 1
2.1	temp	M_MASS_OK	BOOL		Memoria de peso OK
2.2	temp	M_CONTENT_OK	BOOL		Memoria da verificacao da UA
2.3	temp	M_MASS_FAIL	BOOL		Memoria temporaria 2
2.4	temp	M_CONTENT_FAIL	BOOL		Memoria temporaria 1

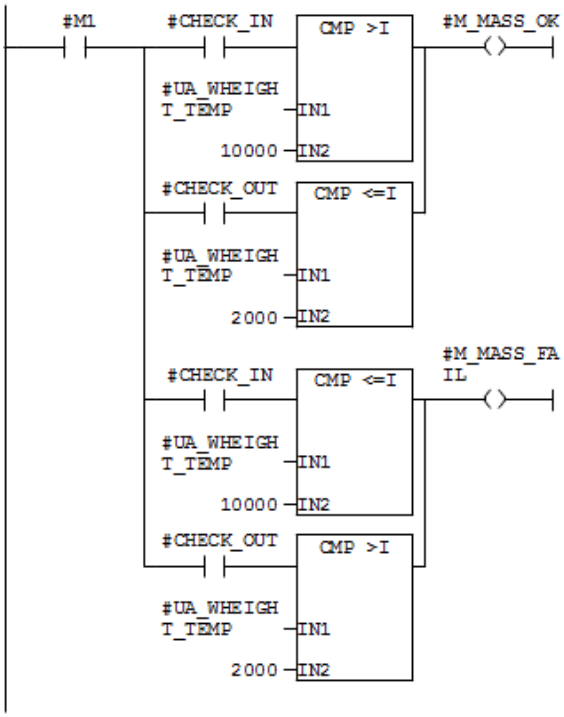
Block: FC7

Network: 1 Faz a leitura do peso da UA



Symbol information
PIW128 UA_WEIGHT Leitura do peso da UA

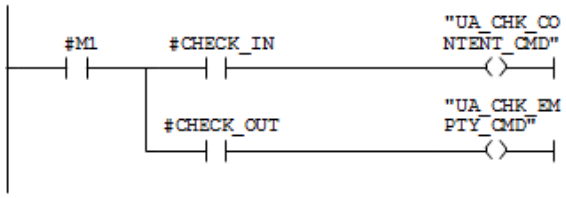
Network: 2 Verifica as condicoes de peso - check_in



Page 1..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC7 - <offline> 09/21/2011 16:28:40

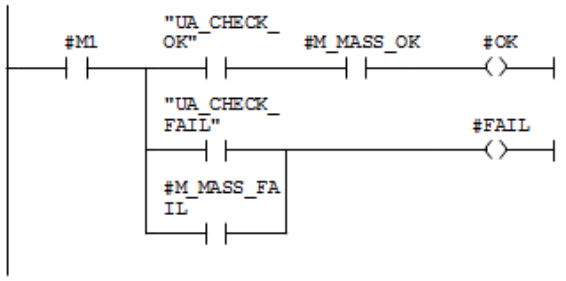
Network: 3 Verifica o interior da UA



Symbol information

Q125.6	UA_CHK_CONTENT_CMD	Comanda a verificacao do interior da UA
Q124.5	UA_CHK_EMPTY_CMD	Comanda a verificacao para detectar se a UA esta vazia

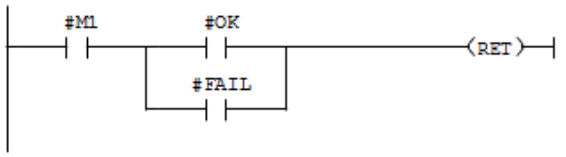
Network: 4 Define se a o conteudo da ua e validado ou nao



Symbol information

I125.0	UA_CHECK_OK	Verificacao da UA - Conteudo OK
I125.2	UA_CHECK_FAIL	Verificacao da UA - Conteudo INVALIDO

Network: 5 Termina a funcao



ANEXO II-X

FC8 “FC_REGISTER”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

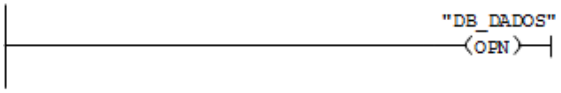
FC8 - <offline>

"FC_REGISTER" Regista a operacao de check-in/check-out
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 16:13:40
Interface: 20-07-2011 15:21:11
Lengths (block/logic/data): 07702 07036 00044

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	UA_SELECTED	INT		UA Seleccionada
2.0	in	USER_ID	INT		Identificacao do utilizador
4.0	in	CHECK_IN	BOOL		Operacao de check-in
4.1	in	CHECK_OUT	BOOL		Operacao de check-out
6.0	out	TIME_COUNT	TIME		Tempo total do armazenamento
	in_out				
0.0	temp	DATE_ERROR	INT		Erro de leitura da data
2.0	temp	ACTUAL_DT	DATE_AND_TIME		Data e hora actual
10.0	temp	TIME_COUNT_temp	TIME		Variavel de tempo temporaria
14.0	temp	COUTER_TEMP	INT		Variavel temporaria do contagem de ciclos
16.0	temp	ACTUAL_TIME	TIME_OF_DAY		Hora actual
20.0	temp	ACTUAL_DATE	DATE		Data actual
22.0	temp	CHECK_IN_DT	DATE_AND_TIME		Data e hora de check_in

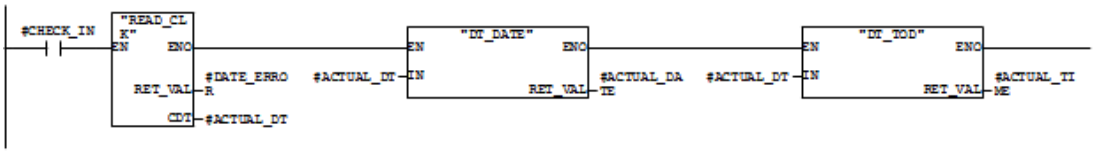
Block: FC8

Network: 1 LOAD DB



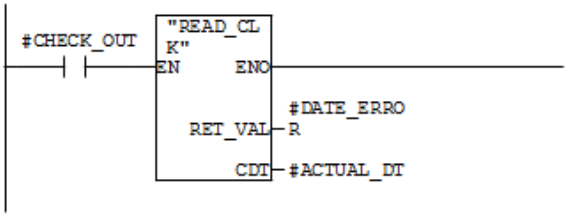
Symbol information
DB1 DB_DADOS Guarda o registo dos utilizadores e dos ciclos de utilizacao

Network: 2 START check-in



Symbol information
SFC1 READ_CLK Read System Clock
FC16 DT_DATE DT to DATE
FC18 DT_TOD DT to TOD

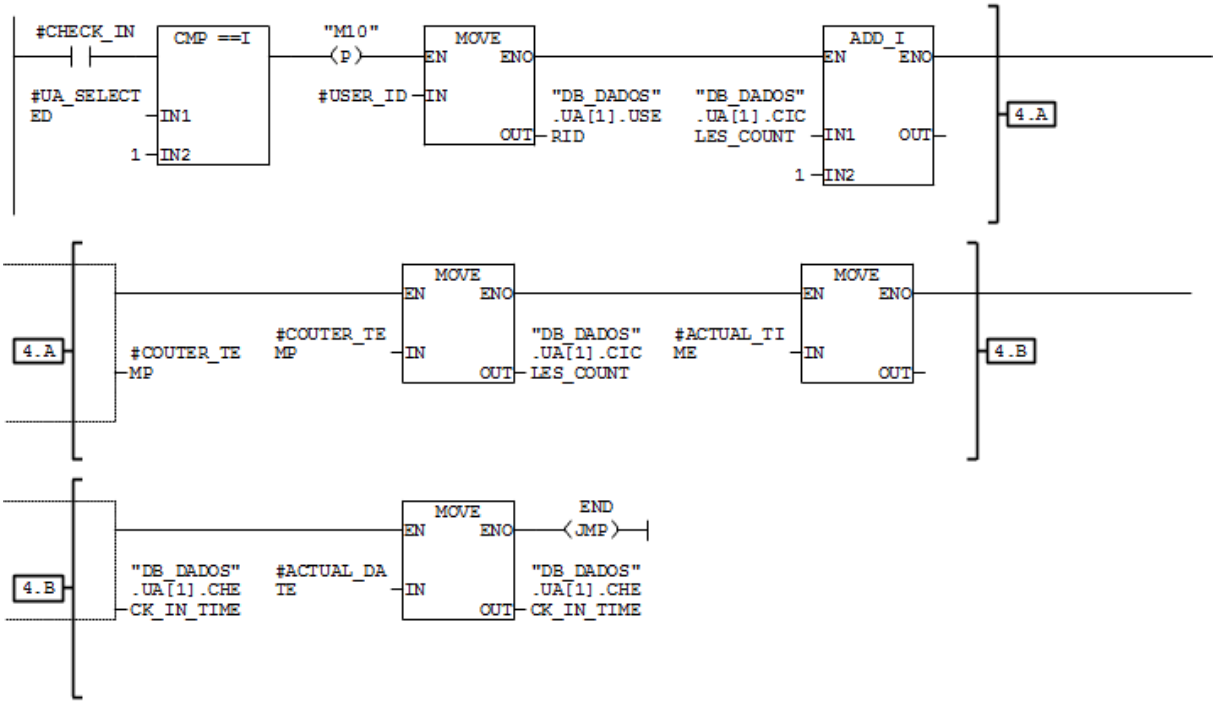
Network: 3 START check-out



Symbol information
SFC1 READ_CLK Read System Clock

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 – <offline> 09/21/2011 16:28:45

Network: 4 UA 1

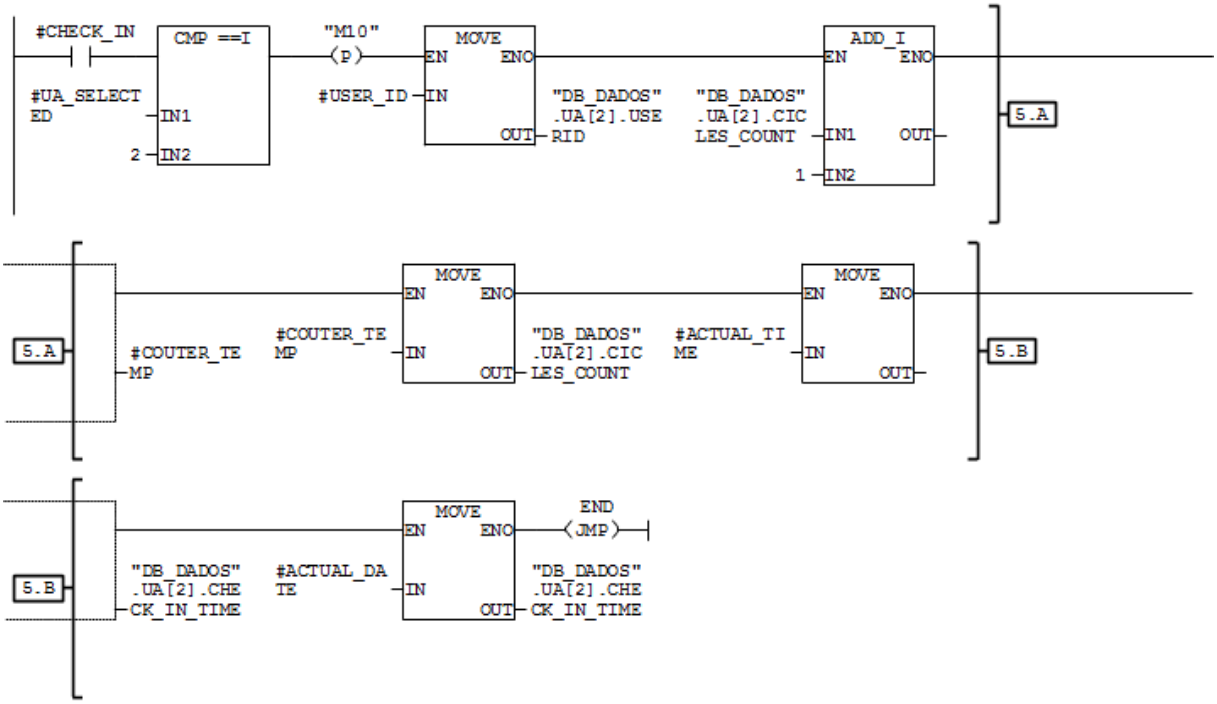


Symbol information

M2.3	M10	
DB1.DBW2	"DB_DADOS".UA[1].USERID	Identificacao do utilizador registado na UA
DB1.DBW4	"DB_DADOS".UA[1].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD6	"DB_DADOS".UA[1].CHECK_IN_TIME	hora do check-in

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 5 UA 2

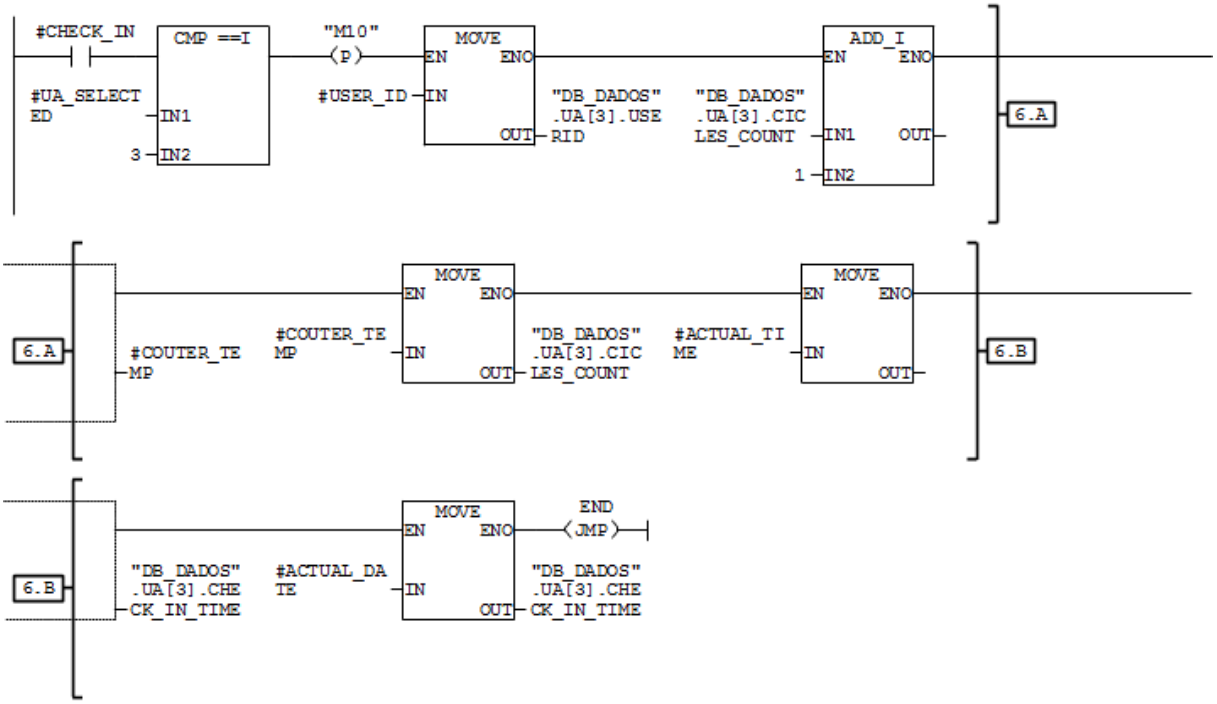



```
Symbol information
M2.3          M10
DB1.DBW12     "DB_DADOS".UA[2].USERID        Identificacao do utilizador registado na UA
DB1.DBW14     "DB_DADOS".UA[2].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD16     "DB_DADOS".UA[2].CHECK_IN_TIMEhora do check-in
```

Page 3..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 – <offline> 09/21/2011 16:28:45

Network: 6 UA 3

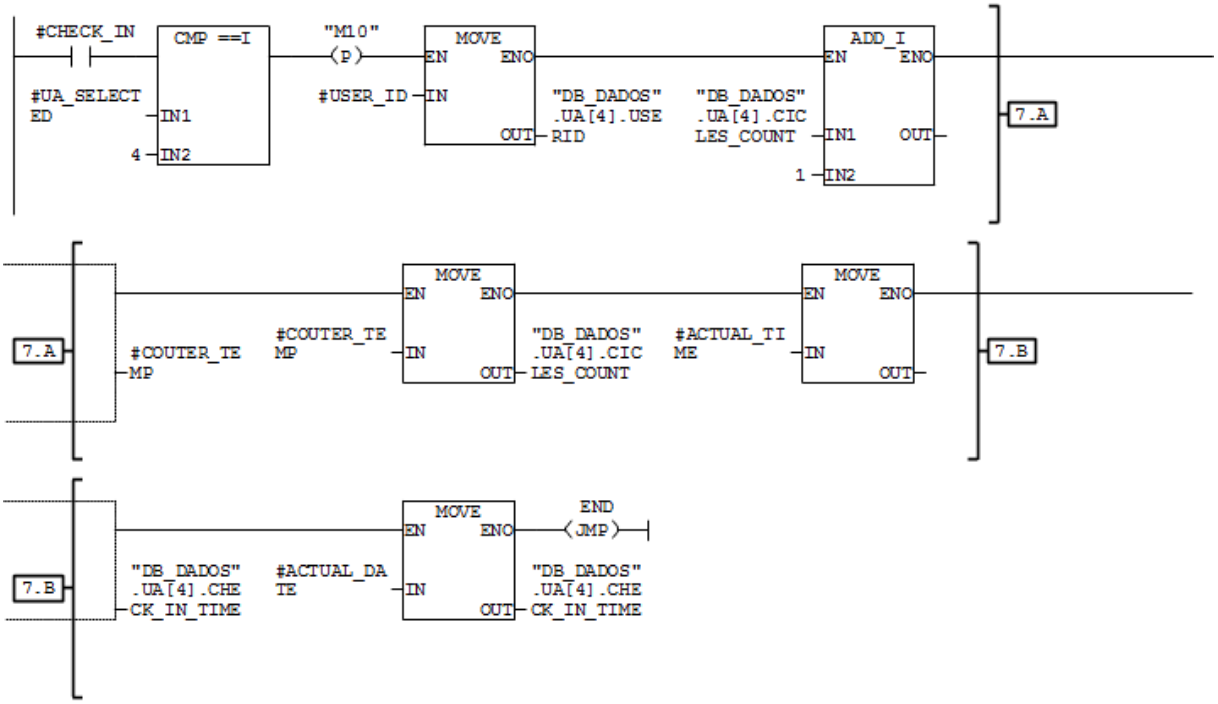


Symbol information

M2.3	M10	
DB1.DBW22	"DB_DADOS".UA[3].USERID	Identificacao do utilizador registado na UA
DB1.DBW24	"DB_DADOS".UA[3].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD26	"DB_DADOS".UA[3].CHECK_IN_TIME	hora do check-in

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 7 UA 4



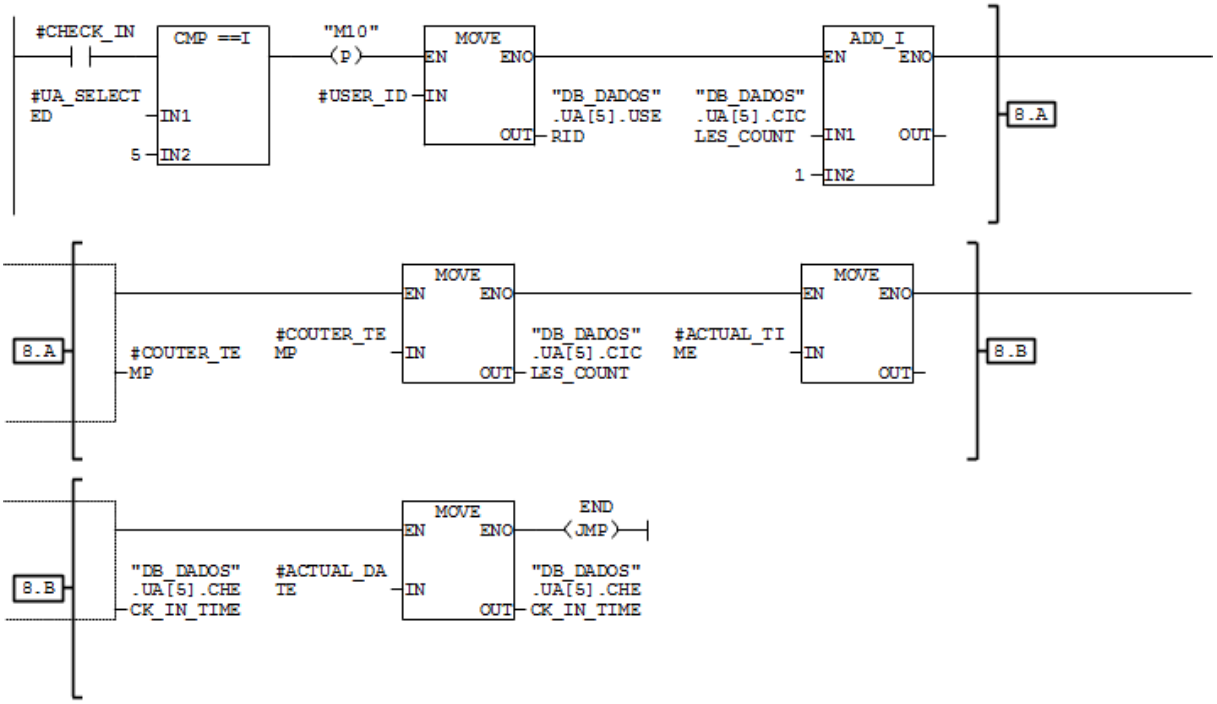
Symbol information

M2.3	M10	
DB1.DBW32	"DB_DADOS".UA[4].USERID	Identificacao do utilizador registado na UA
DB1.DBW34	"DB_DADOS".UA[4].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD36	"DB_DADOS".UA[4].CHECK_IN_TIME	hora do check-in

Page 5..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 – <offline> 09/21/2011 16:28:45

Network: 8 UA 5



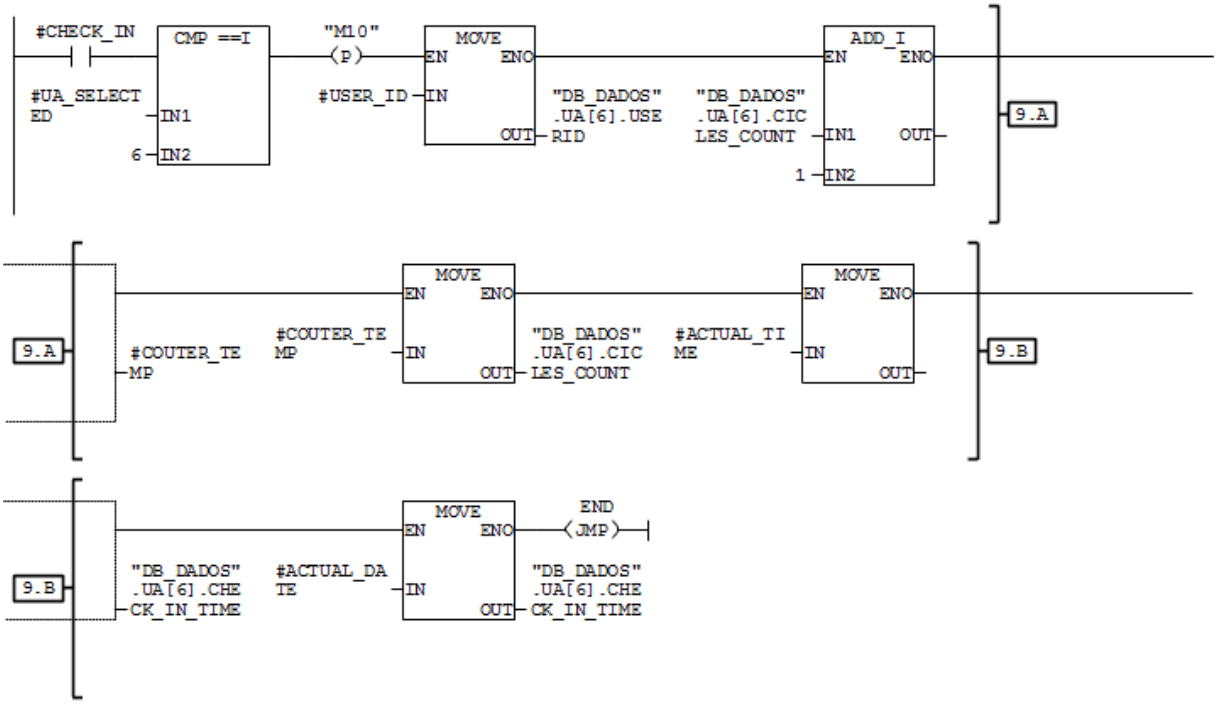
Symbol information

M2.3	M10	
DB1.DBW42	"DB_DADOS".UA[5].USERID	Identificacao do utilizador registado na UA
DB1.DBW44	"DB_DADOS".UA[5].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD46	"DB_DADOS".UA[5].CHECK_IN_TIME	hora do check-in

Page 6..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 9 UA 6



Symbol information

M2.3	M10	
DB1.DBW52	"DB_DADOS".UA[6].USERID	Identificacao do utilizador registado na UA
DB1.DBW54	"DB_DADOS".UA[6].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD56	"DB_DADOS".UA[6].CHECK_IN_TIME	hora do check-in

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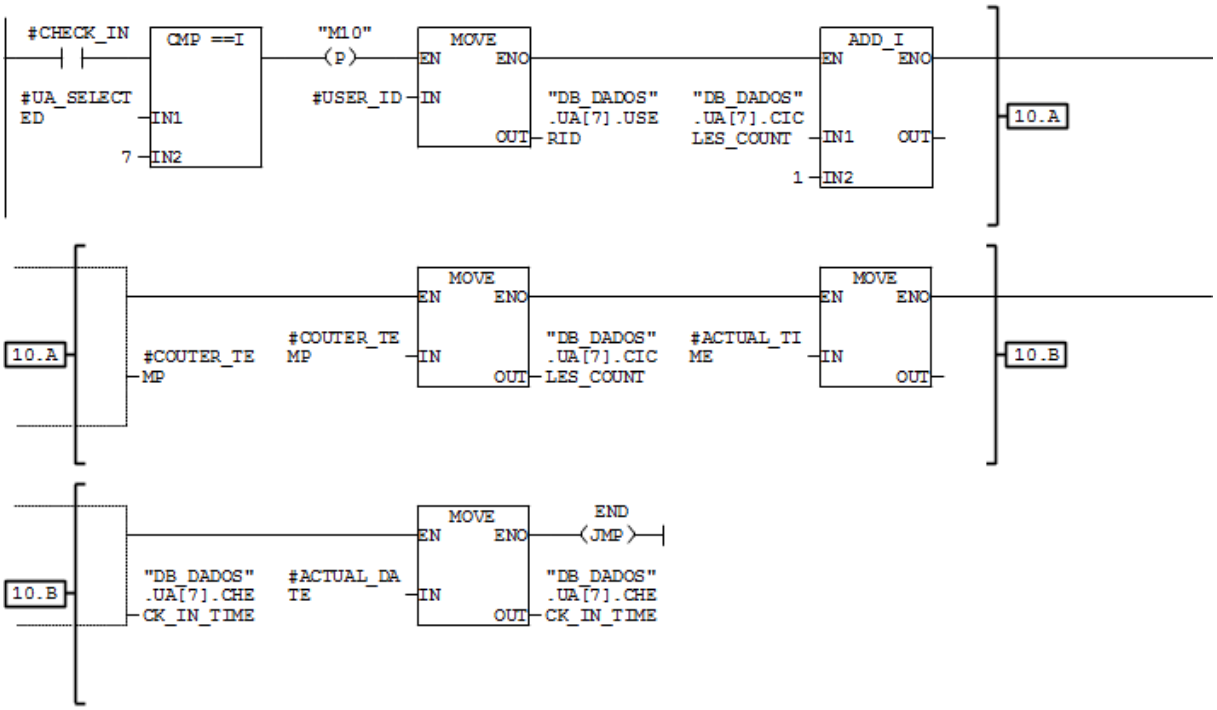
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 10 UA 7




```
Symbol information
M2.3          M10
DB1.DBW62     "DB_DADOS".UA[7].USERID         Identificacao do utilizador registado na UA
DB1.DBW64     "DB_DADOS".UA[7].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD66     "DB_DADOS".UA[7].CHECK_IN_TIMEhora do check-in
```

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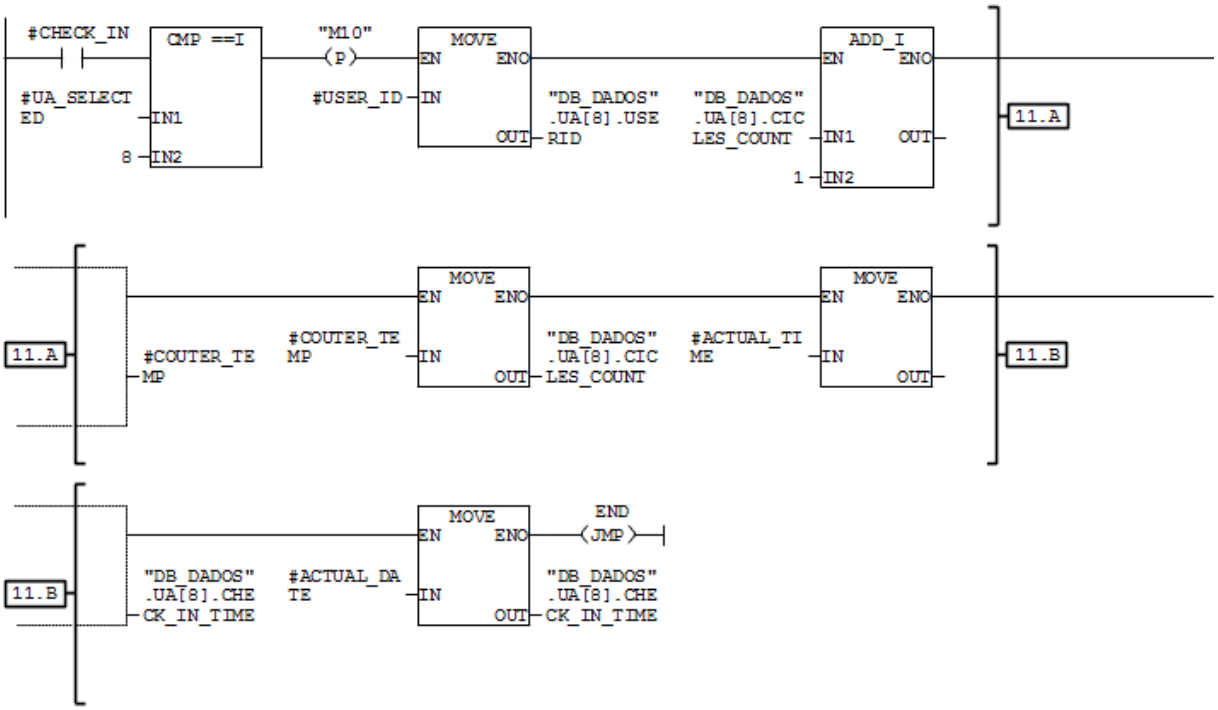
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 11 UA 8




```
Symbol information
M2.3        M10
DB1.DBW72   "DB_DADOS".UA[8].USERID        Identificacao do utilizador registado na UA
DB1.DBW74   "DB_DADOS".UA[8].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD76   "DB_DADOS".UA[8].CHECK_IN_TIMEhora do check-in
```

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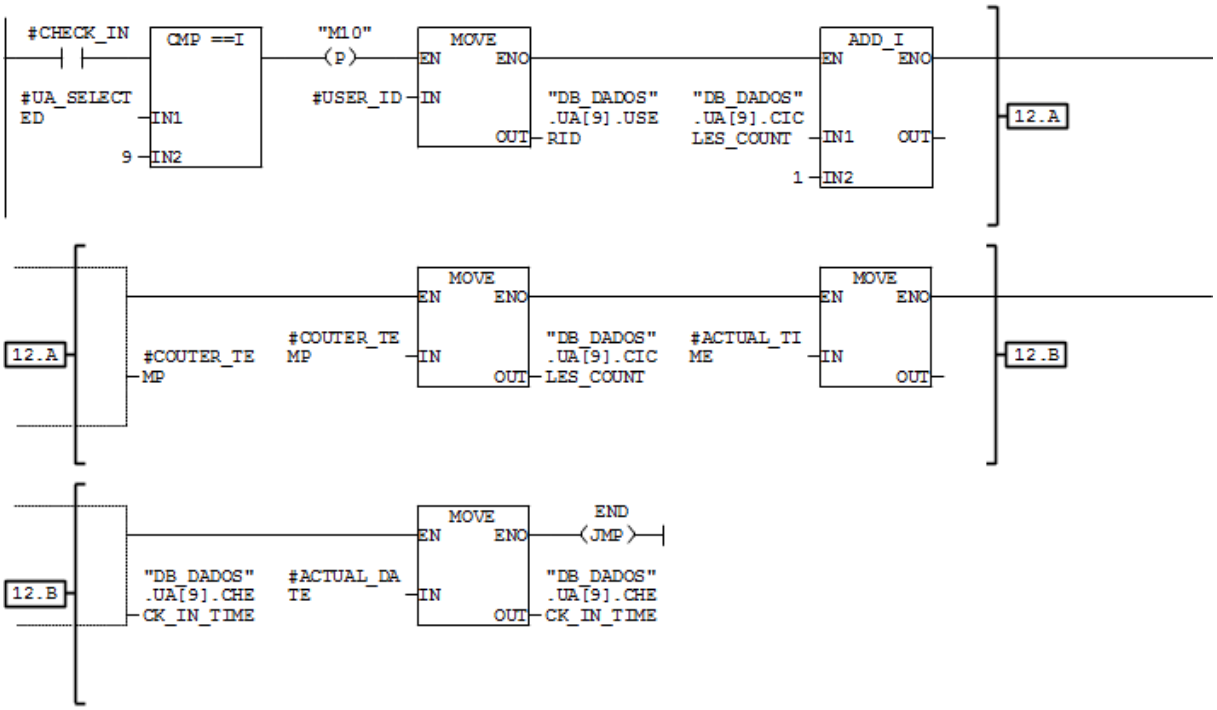
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

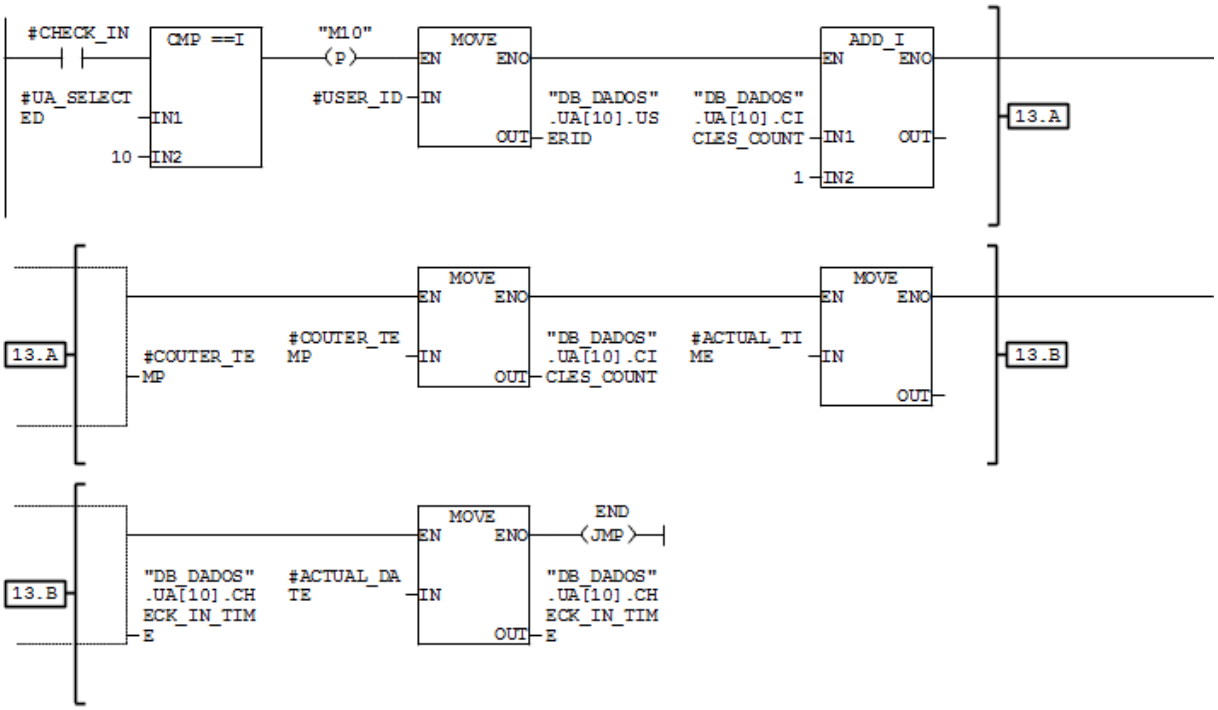
Network: 12 UA 9




```
Symbol information
M2.3          M10
DB1.DBW82     "DB_DADOS".UA[9].USERID         Identificacao do utilizador registado na UA
DB1.DBW84     "DB_DADOS".UA[9].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD86     "DB_DADOS".UA[9].CHECK_IN_TIMEhora do check-in
```

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 13 UA 10




```
Symbol information
M2.3        M10
DB1.DBW92   "DB_DADOS".UA[10].USERID        Identificacao do utilizador registado na UA
DB1.DBW94   "DB_DADOS".UA[10].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD96   "DB_DADOS".UA[10].CHECK_IN_TIMEhora do check-in
```

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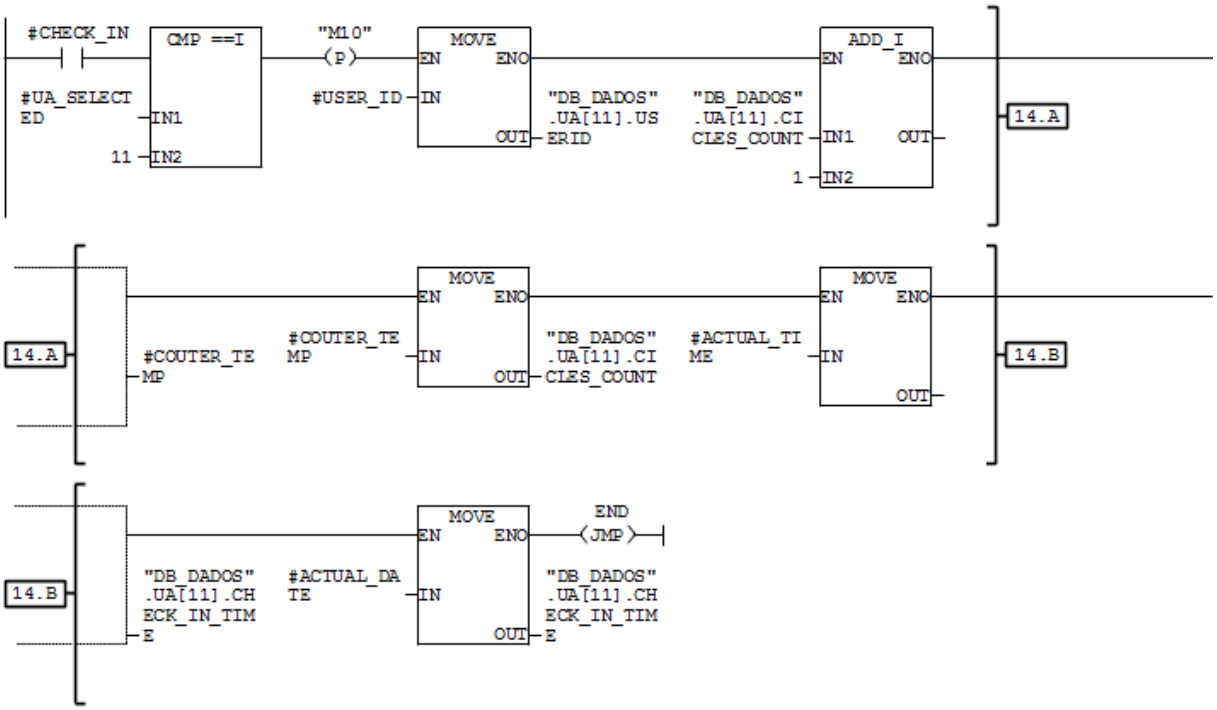
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 14 UA 11

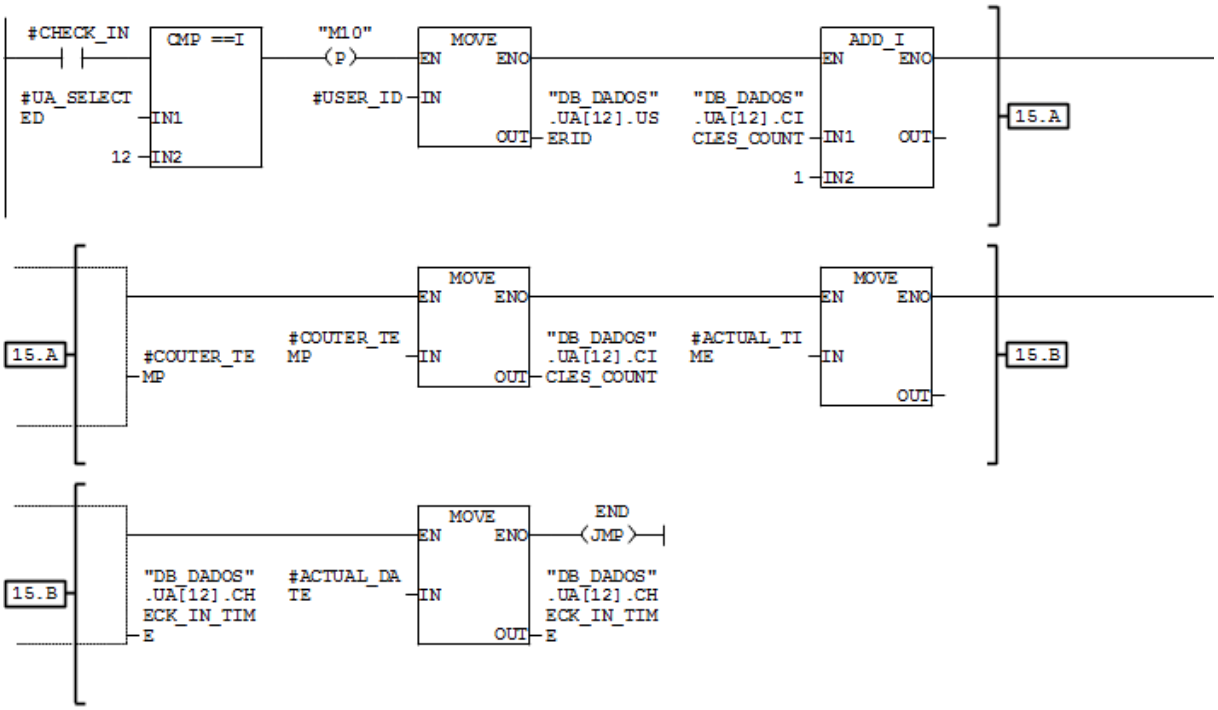


Symbol information

```
M2.3          M10
DB1.DBW102    "DB_DADOS".UA[11].USERID        Identificacao do utilizador registado na UA
DB1.DBW104    "DB_DADOS".UA[11].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD106    "DB_DADOS".UA[11].CHECK_IN_TIMEhora do check-in
```

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 15 UA 12




```
Symbol information
M2.3          M10
DB1.DBW112    "DB_DADOS".UA[12].USERID         Identificacao do utilizador registado na UA
DB1.DBW114    "DB_DADOS".UA[12].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD116    "DB_DADOS".UA[12].CHECK_IN_TIMEhora do check-in
```

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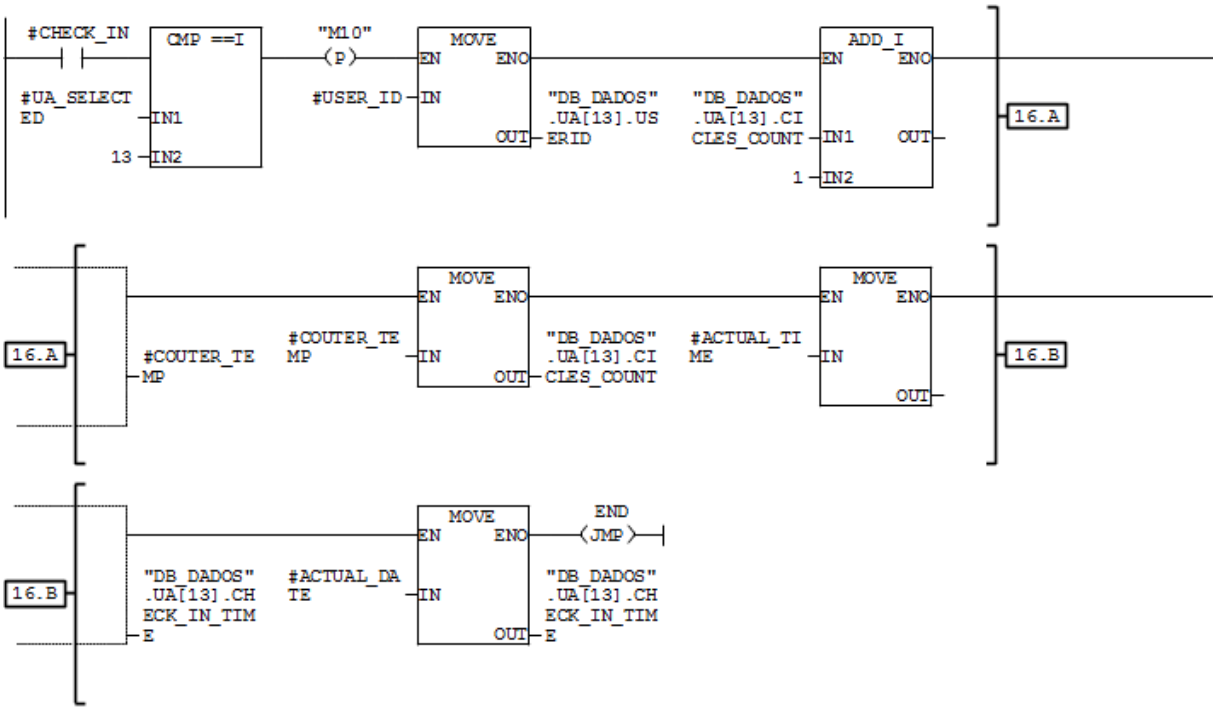
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 16 UA 13

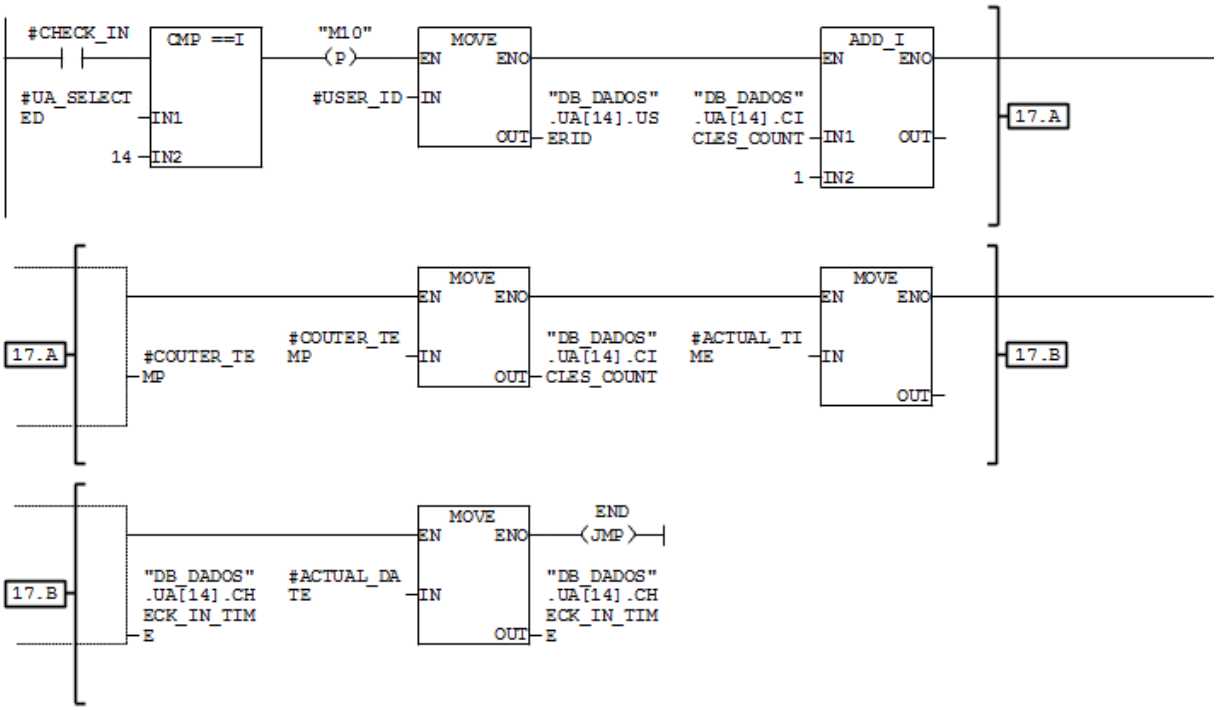


Symbol information

M2.3	M10	
DB1.DBW122	"DB_DADOS".UA[13].USERID	Identificacao do utilizador registado na UA
DB1.DBW124	"DB_DADOS".UA[13].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD126	"DB_DADOS".UA[13].CHECK_IN_TIME	hora do check-in

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 17 UA 14




```
Symbol information
M2.3         M10
DB1.DBW132   "DB_DADOS".UA[14].USERID        Identificacao do utilizador registado na UA
DB1.DBW134   "DB_DADOS".UA[14].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD136   "DB_DADOS".UA[14].CHECK_IN_TIMEhora do check-in
```

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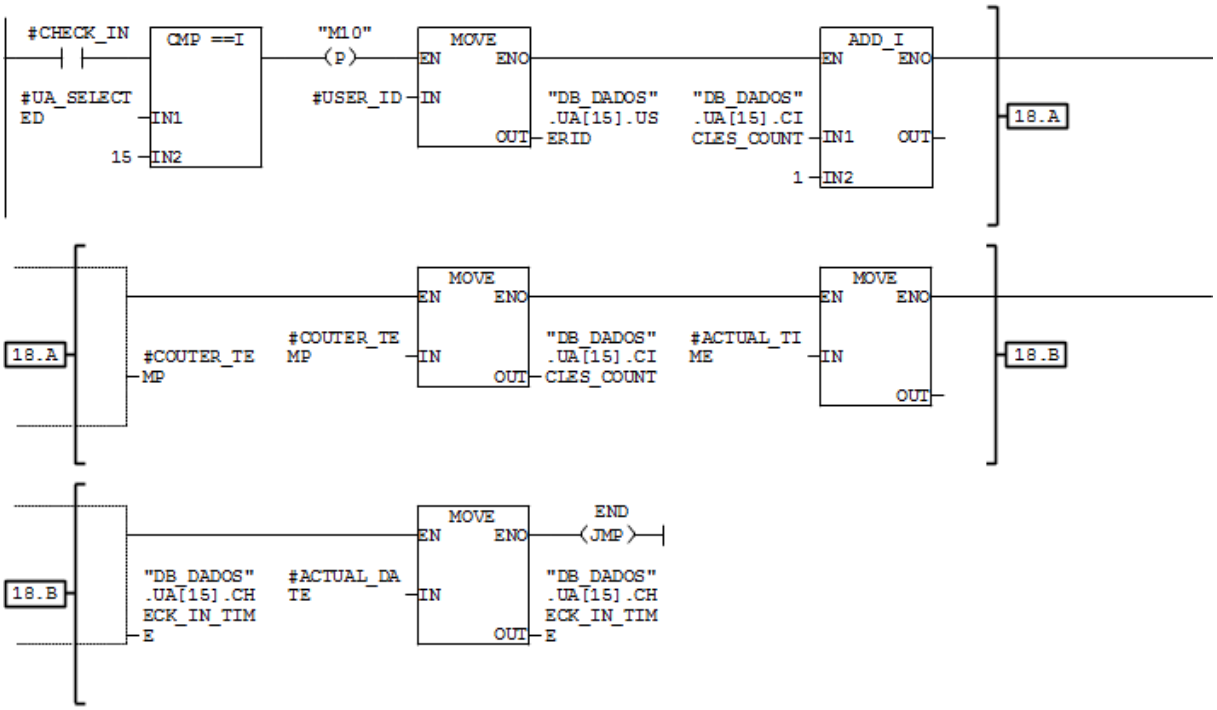
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 18 UA 15




```
Symbol information
M2.3          M10
DB1.DBW142    "DB_DADOS".UA[15].USERID        Identificacao do utilizador registado na UA
DB1.DBW144    "DB_DADOS".UA[15].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD146    "DB_DADOS".UA[15].CHECK_IN_TIMEhora do check-in
```

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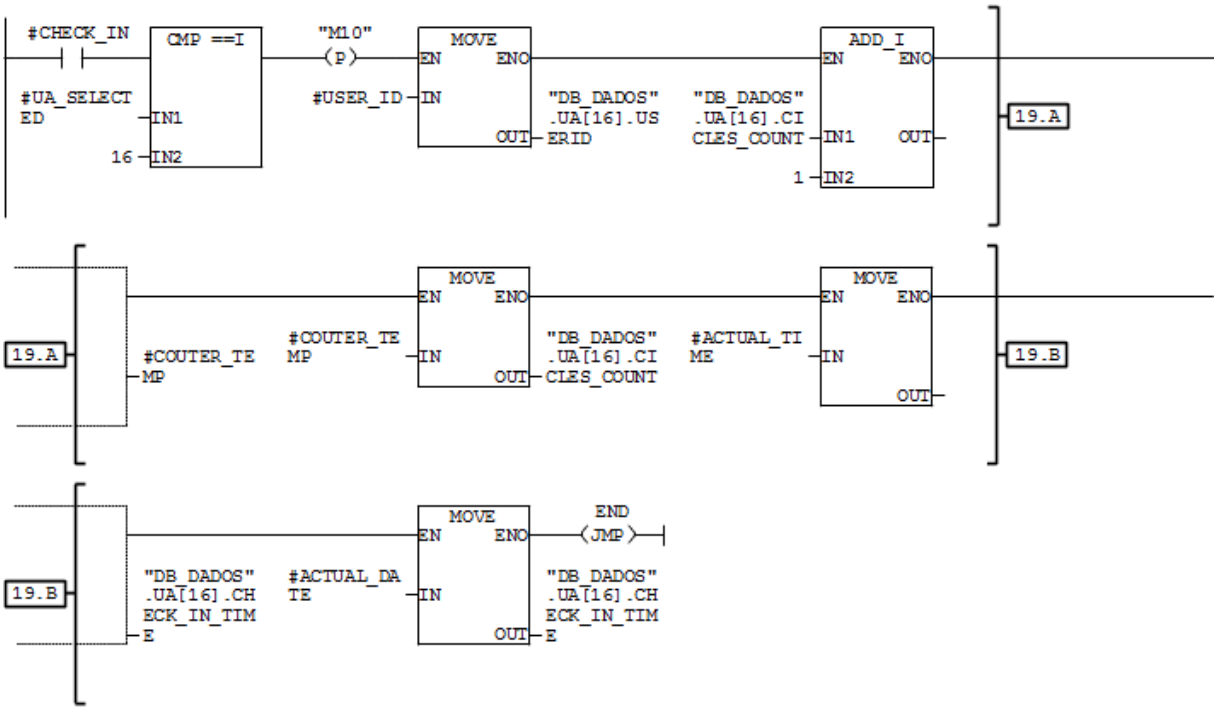
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 19 UA 16




```
Symbol information
M2.3        M10
DB1.DBW152  "DB_DADOS".UA[16].USERID        Identificacao do utilizador registado na UA
DB1.DBW154  "DB_DADOS".UA[16].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD156  "DB_DADOS".UA[16].CHECK_IN_TIMEhora do check-in
```

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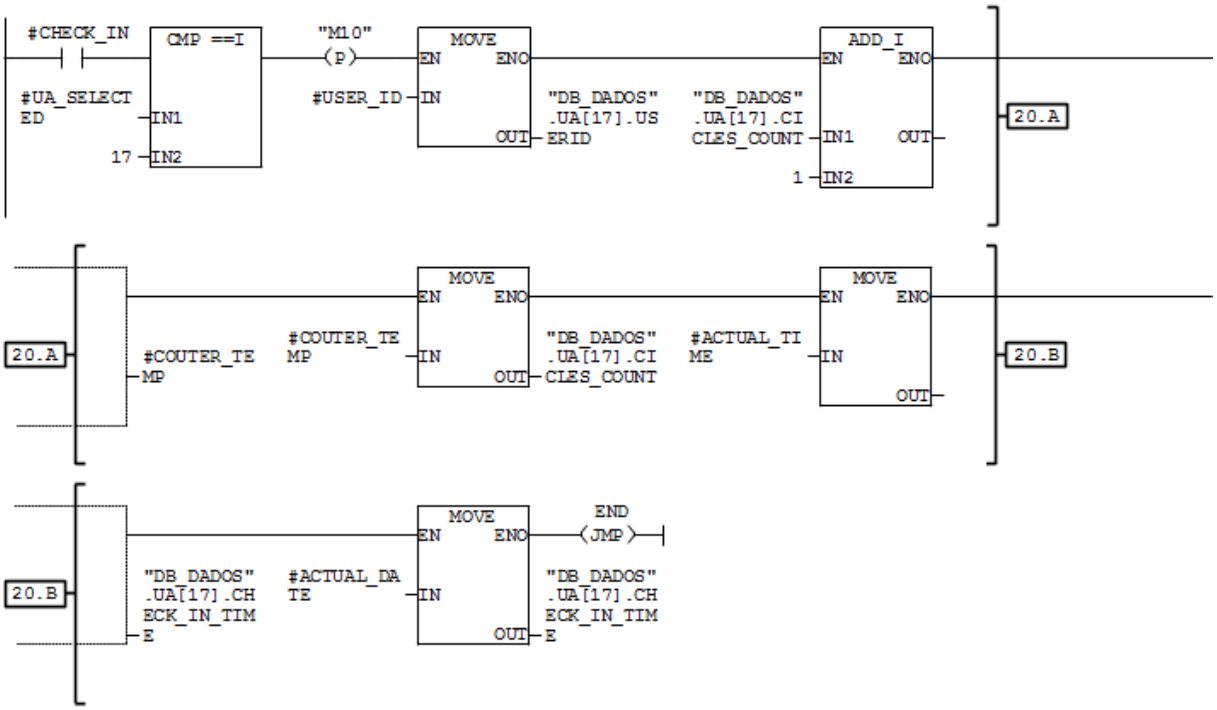
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 20 UA 17

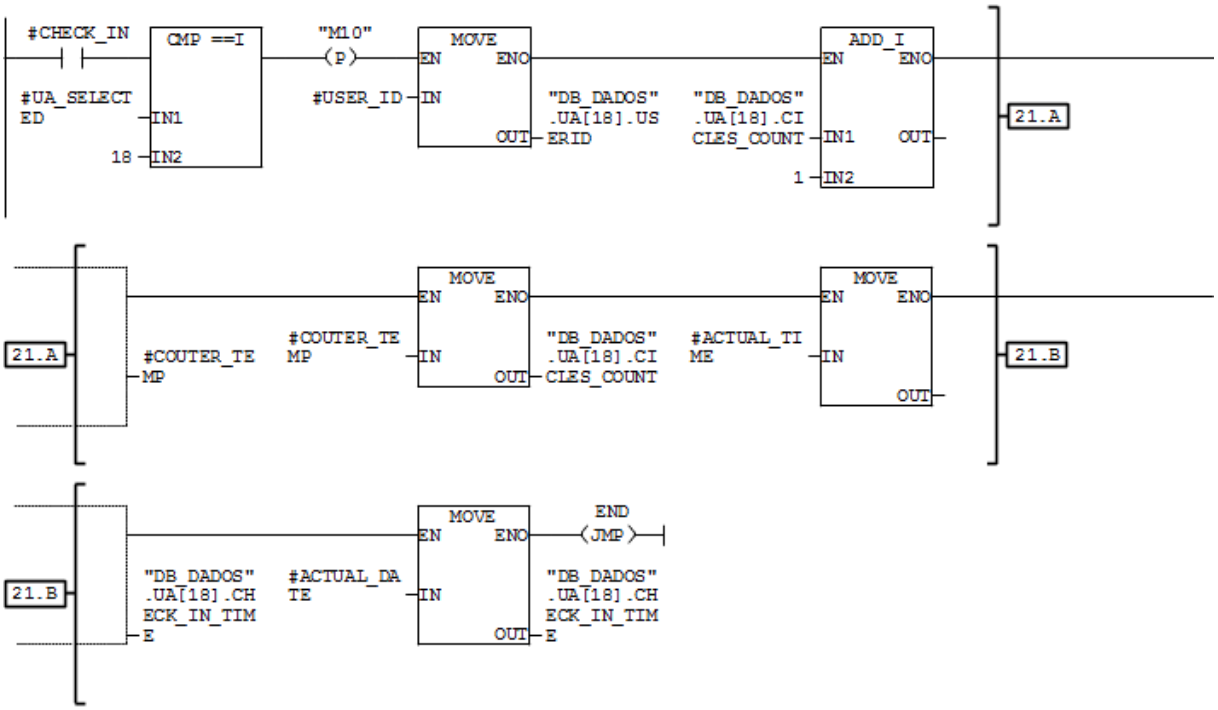


Symbol information

M2.3	M10	
DB1.DBW162	"DB_DADOS".UA[17].USERID	Identificacao do utilizador registado na UA
DB1.DBW164	"DB_DADOS".UA[17].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD166	"DB_DADOS".UA[17].CHECK_IN_TIME	hora do check-in

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 21 UA 18




```
Symbol information
M2.3          M10
DB1.DBW172    "DB_DADOS".UA[18].USERID         Identificacao do utilizador registado na UA
DB1.DBW174    "DB_DADOS".UA[18].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD176    "DB_DADOS".UA[18].CHECK_IN_TIMEhora do check-in
```

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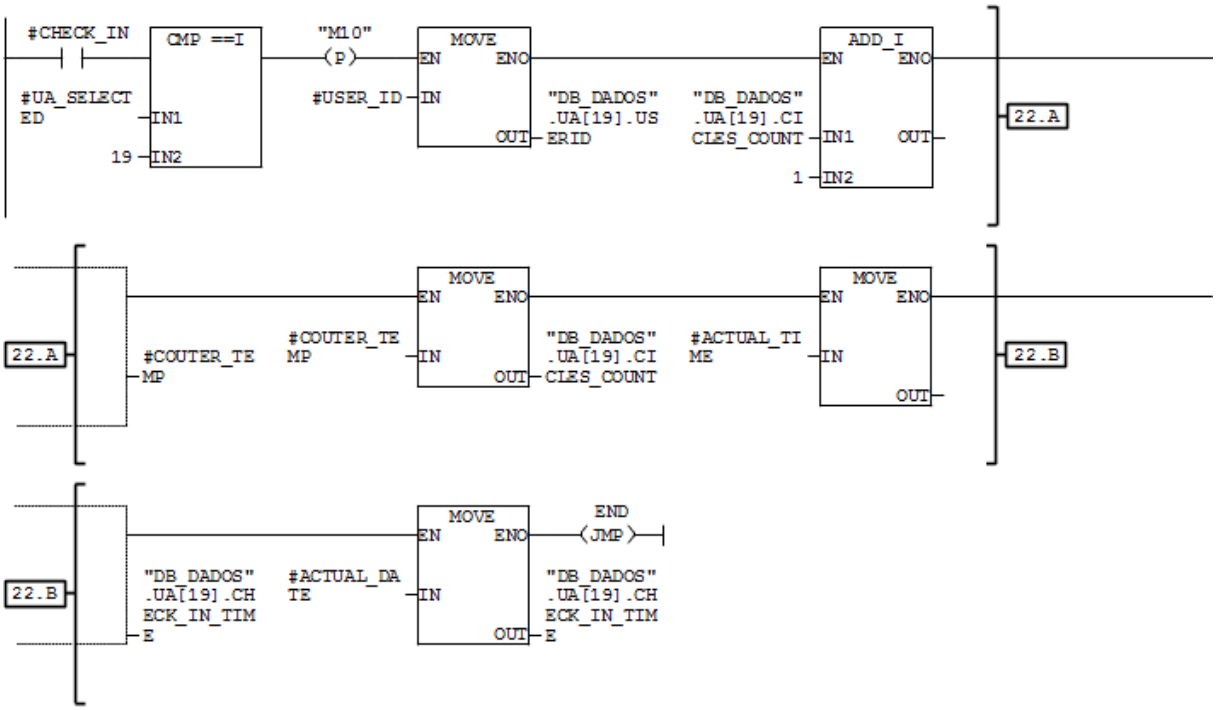
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

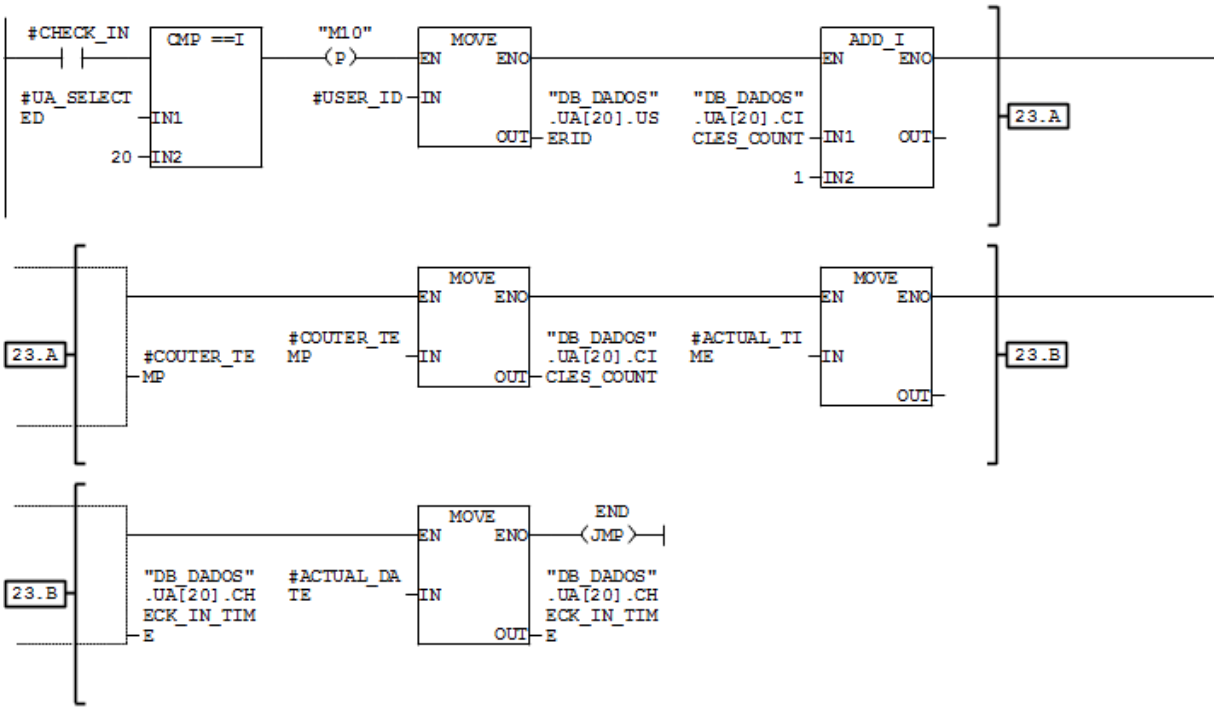
Network: 22 UA 19




```
Symbol information
M2.3          M10
DB1.DBW182    "DB_DADOS".UA[19].USERID        Identificacao do utilizador registado na UA
DB1.DBW184    "DB_DADOS".UA[19].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD186    "DB_DADOS".UA[19].CHECK_IN_TIMEhora do check-in
```

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 23 UA 20




```
Symbol information
M2.3          M10
DB1.DBW192    "DB_DADOS".UA[20].USERID         Identificacao do utilizador registado na UA
DB1.DBW194    "DB_DADOS".UA[20].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD196    "DB_DADOS".UA[20].CHECK_IN_TIMEhora do check-in
```

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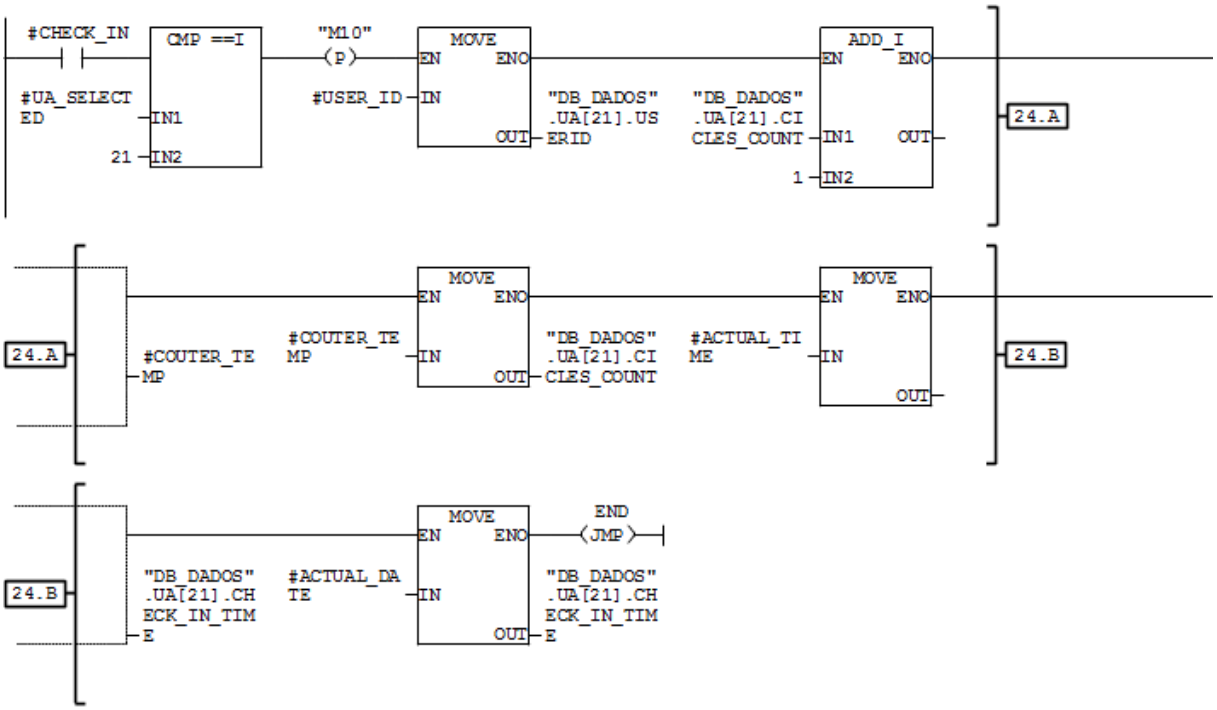
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

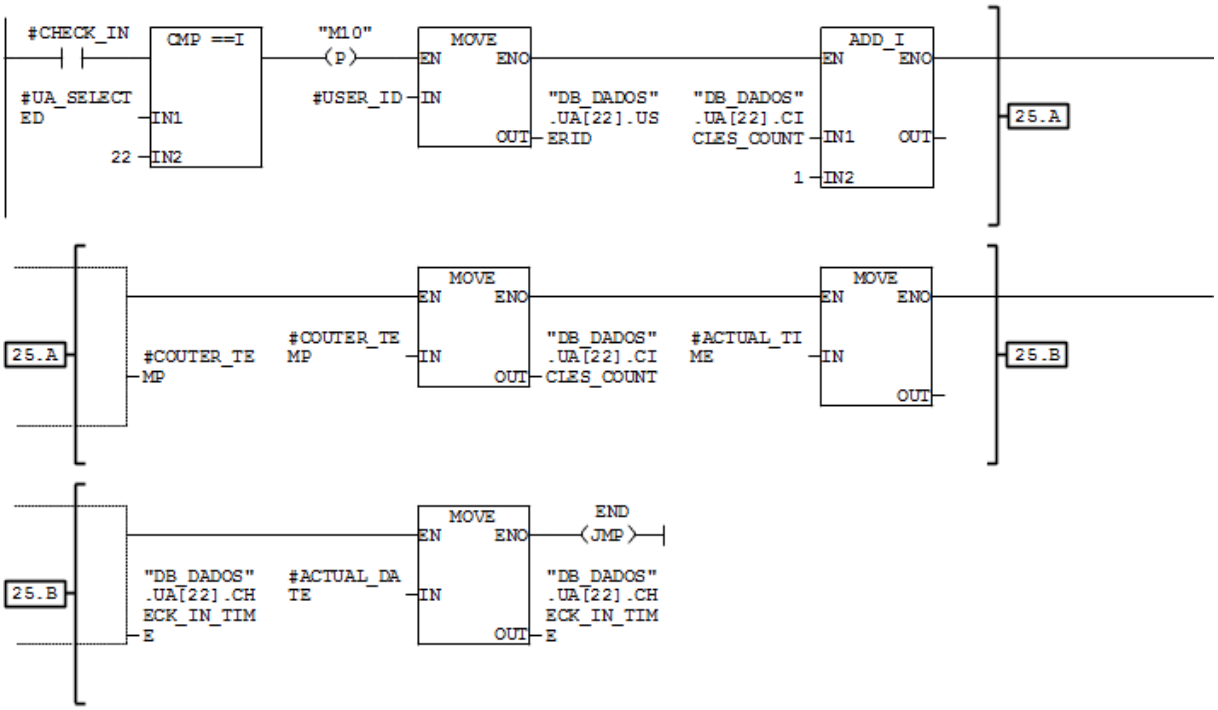
Network: 24 UA 21




```
Symbol information
M2.3          M10
DB1.DBW202    "DB_DADOS".UA[21].USERID        Identificacao do utilizador registado na UA
DB1.DBW204    "DB_DADOS".UA[21].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD206    "DB_DADOS".UA[21].CHECK_IN_TIMEhora do check-in
```

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Network: 25 UA 22




```
Symbol information
M2.3          M10
DB1.DBW212    "DB_DADOS".UA[22].USERID         Identificacao do utilizador registado na UA
DB1.DBW214    "DB_DADOS".UA[22].CICLES_COUNT   Registo do numero de ciclos da UA
DB1.DBD216    "DB_DADOS".UA[22].CHECK_IN_TIMEhora do check-in
```

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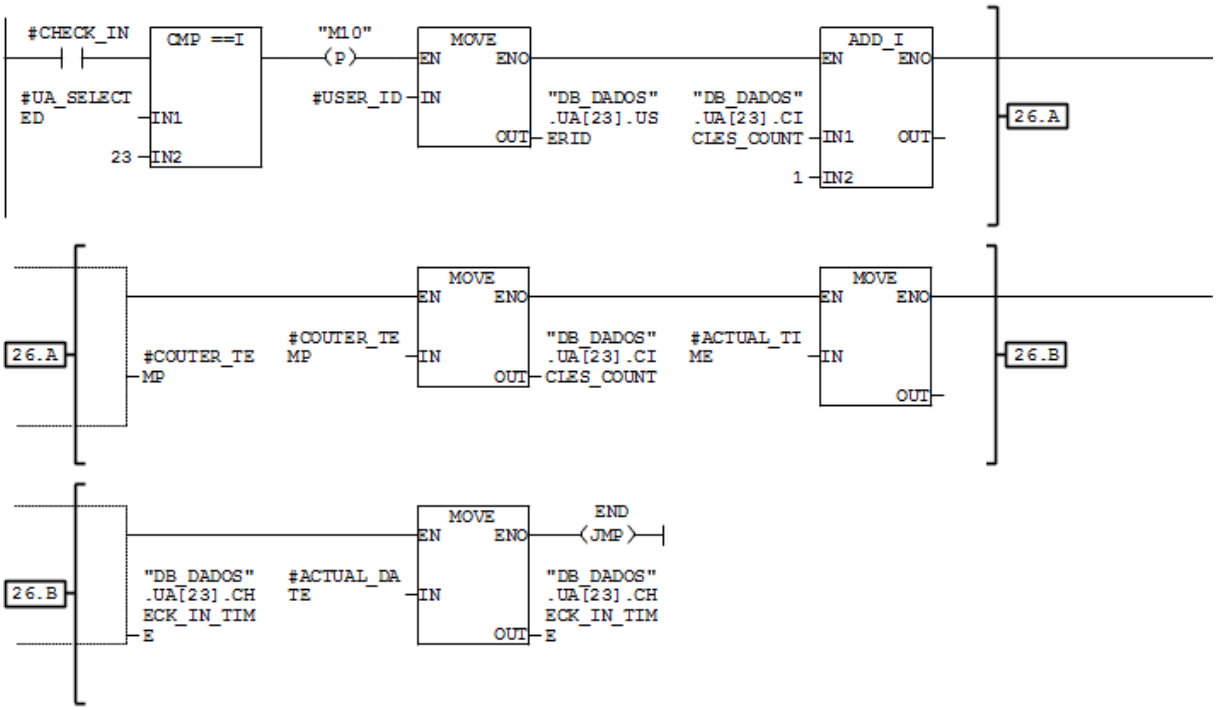
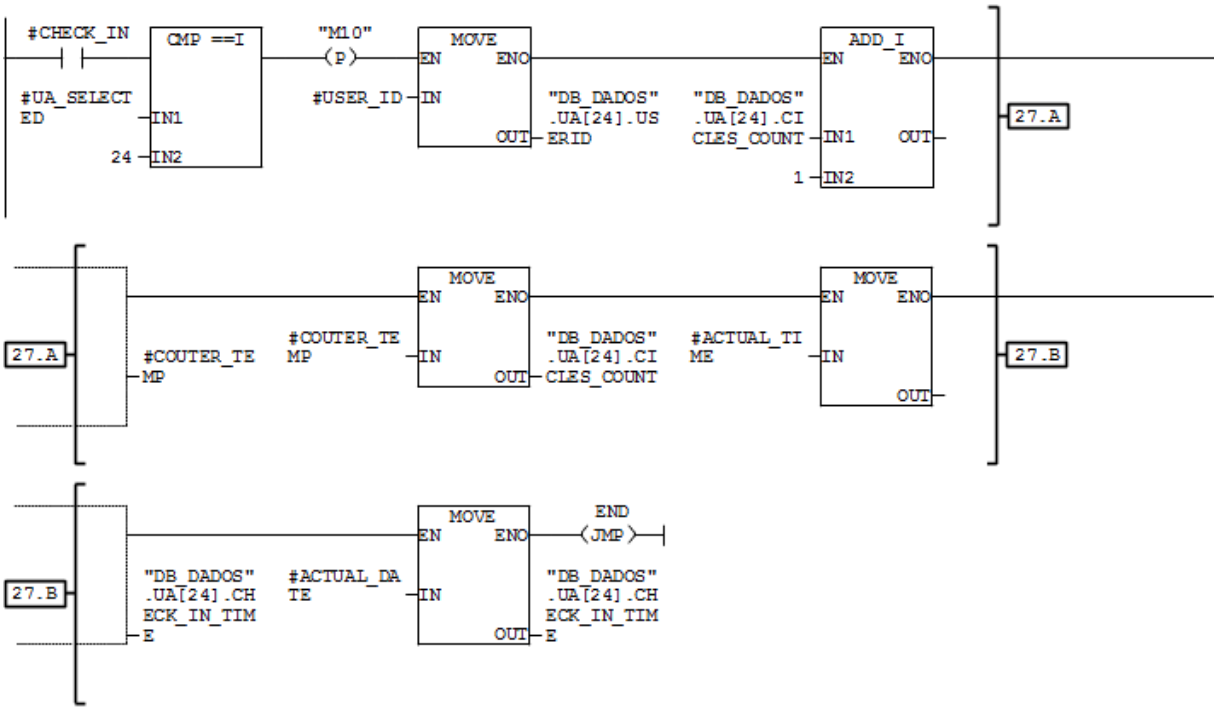
Network: 26 UA 23




```
Symbol information
M2.3          M10
DB1.DBW222    "DB_DADOS".UA[23].USERID        Identificacao do utilizador registado na UA
DB1.DBW224    "DB_DADOS".UA[23].CICLES_COUNT  Registo do numero de ciclos da UA
DB1.DBD226    "DB_DADOS".UA[23].CHECK_IN_TIMEhora do check-in
```

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

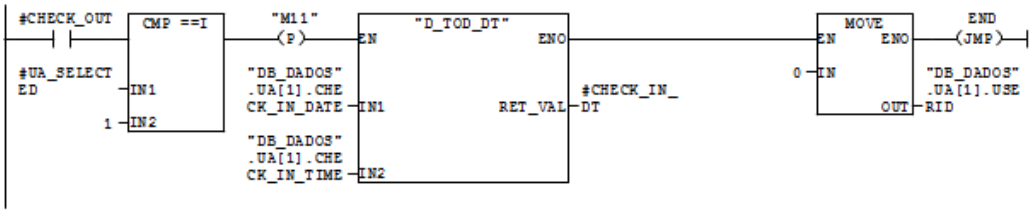
Network: 27 UA 24



Symbol information

M2.3	M10	
DB1.DBW232	"DB_DADOS".UA[24].USERID	Identificacao do utilizador registado na UA
DB1.DBW234	"DB_DADOS".UA[24].CICLES_COUNT	Registo do numero de ciclos da UA
DB1.DBD236	"DB_DADOS".UA[24].CHECK_IN_TIME	hora do check-in

Network: 28 UA 1

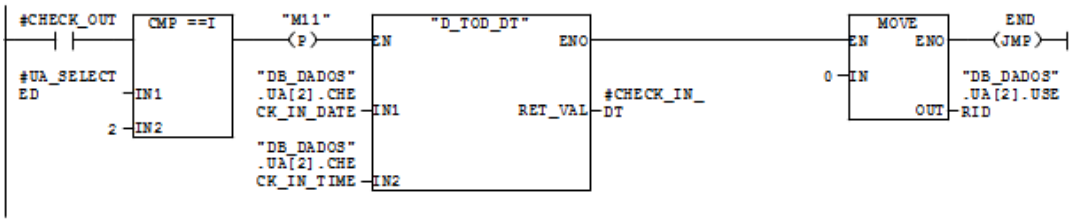


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW10	"DB_DADOS".UA[1].CHECK_IN_DATE	data do check-in
DB1.DBD6	"DB_DADOS".UA[1].CHECK_IN_TIME	hora do check-in
DB1.DBW2	"DB_DADOS".UA[1].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

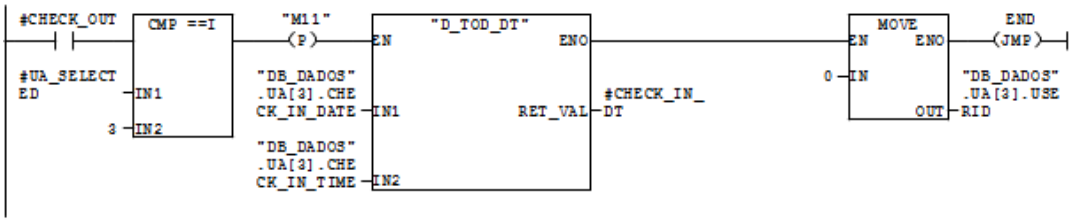
Network: 29 UA 2



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW20	"DB_DADOS".UA[2].CHECK_IN_DATE	data do check-in
DB1.DBD16	"DB_DADOS".UA[2].CHECK_IN_TIME	hora do check-in
DB1.DBW12	"DB_DADOS".UA[2].USERID	Identificacao do utilizador registado na UA

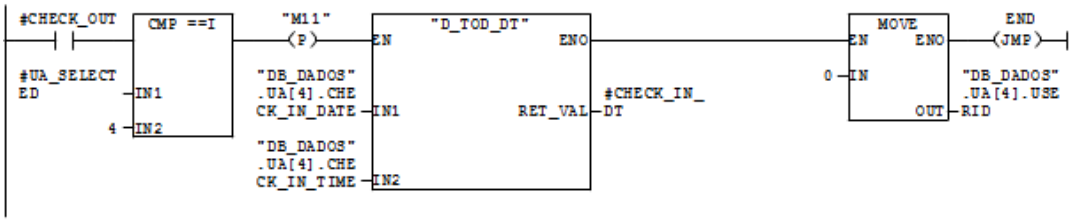
Network: 30 UA 3



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW30	"DB_DADOS".UA[3].CHECK_IN_DATE	data do check-in
DB1.DBD26	"DB_DADOS".UA[3].CHECK_IN_TIME	hora do check-in
DB1.DBW22	"DB_DADOS".UA[3].USERID	Identificacao do utilizador registado na UA

Network: 31 UA 4

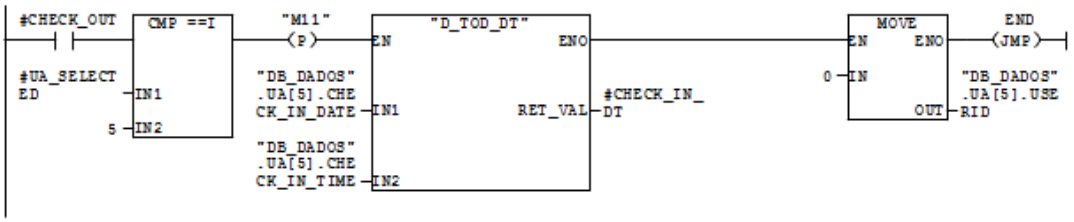


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW40	"DB_DADOS".UA[4].CHECK_IN_DATE	data do check-in
DB1.DBD36	"DB_DADOS".UA[4].CHECK_IN_TIME	hora do check-in
DB1.DBW32	"DB_DADOS".UA[4].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

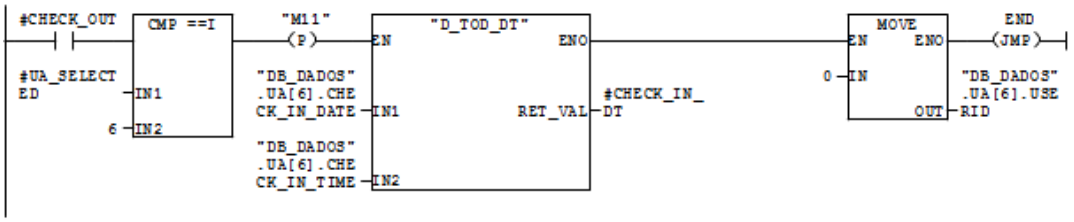
Network: 32 UA 5



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW50	"DB_DADOS".UA[5].CHECK_IN_DATE	data do check-in
DB1.DBD46	"DB_DADOS".UA[5].CHECK_IN_TIME	hora do check-in
DB1.DBW42	"DB_DADOS".UA[5].USERID	Identificacao do utilizador registado na UA

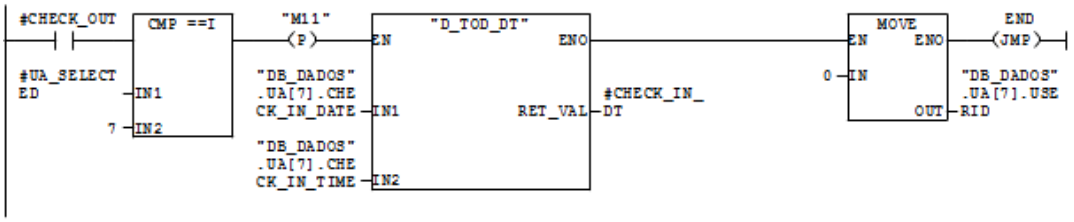
Network: 33 UA 6



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW60	"DB_DADOS".UA[6].CHECK_IN_DATE	data do check-in
DB1.DBD56	"DB_DADOS".UA[6].CHECK_IN_TIME	hora do check-in
DB1.DBW52	"DB_DADOS".UA[6].USERID	Identificacao do utilizador registado na UA

Network: 34 UA 7

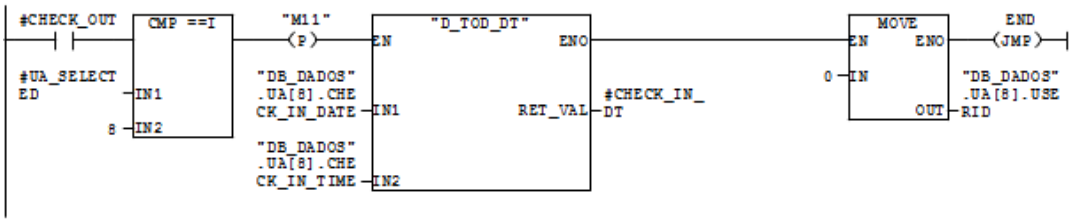


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW70	"DB_DADOS".UA[7].CHECK_IN_DATE	data do check-in
DB1.DBD66	"DB_DADOS".UA[7].CHECK_IN_TIME	hora do check-in
DB1.DBW62	"DB_DADOS".UA[7].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

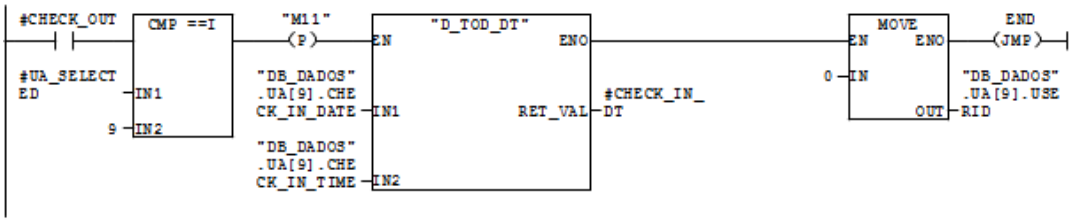
Network: 35 UA 8



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW80	"DB_DADOS".UA[8].CHECK_IN_DATE	data do check-in
DB1.DBD76	"DB_DADOS".UA[8].CHECK_IN_TIME	hora do check-in
DB1.DBW72	"DB_DADOS".UA[8].USERID	Identificacao do utilizador registado na UA

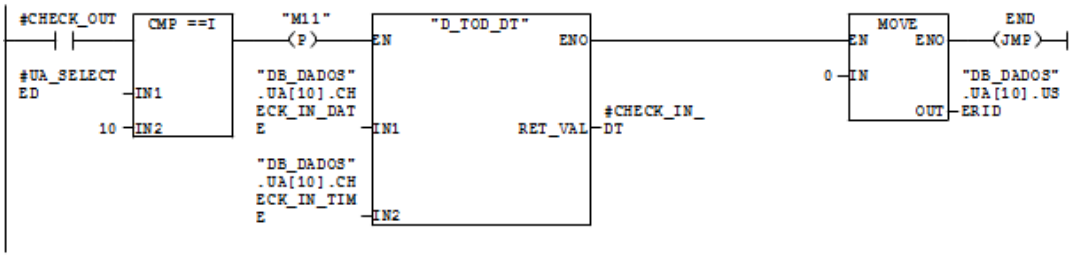
Network: 36 UA 9



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW90	"DB_DADOS".UA[9].CHECK_IN_DATE	data do check-in
DB1.DBD86	"DB_DADOS".UA[9].CHECK_IN_TIME	hora do check-in
DB1.DBW82	"DB_DADOS".UA[9].USERID	Identificacao do utilizador registado na UA

Network: 37 UA 10

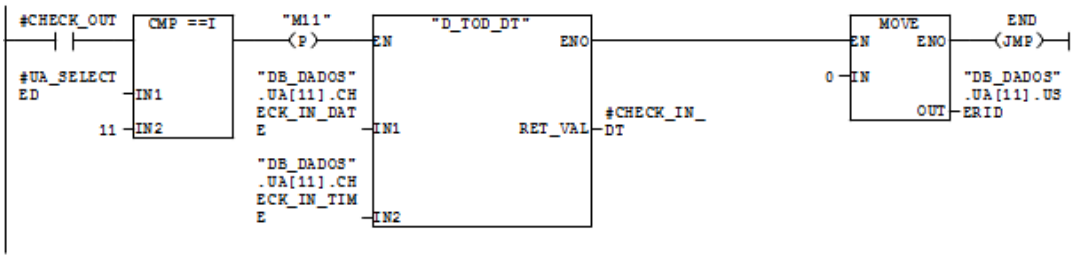


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW100	"DB_DADOS".UA[10].CHECK_IN_DATE	data do check-in
DB1.DBD96	"DB_DADOS".UA[10].CHECK_IN_TIME	hora do check-in
DB1.DBW92	"DB_DADOS".UA[10].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

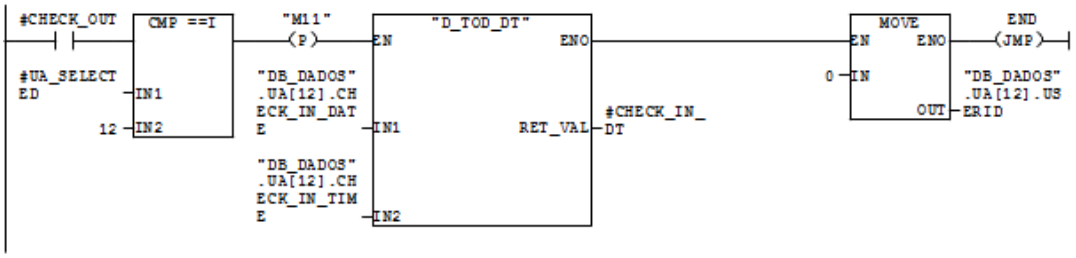
Network: 38 UA 11



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW110	"DB_DADOS".UA[11].CHECK_IN_DATE	data do check-in
DB1.DBD106	"DB_DADOS".UA[11].CHECK_IN_TIME	hora do check-in
DB1.DBW102	"DB_DADOS".UA[11].USERID	Identificacao do utilizador registado na UA

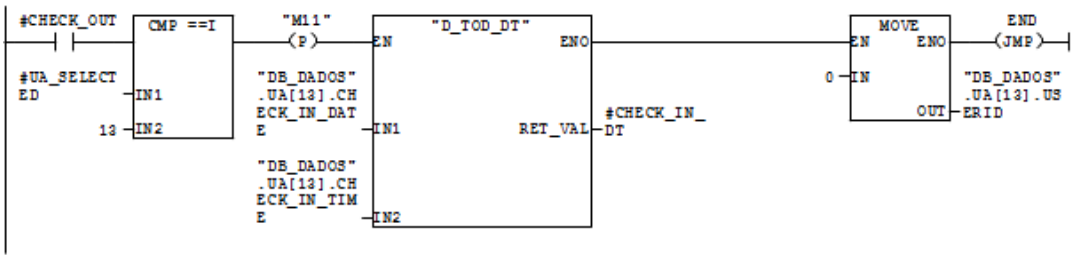
Network: 39 UA 12



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW120	"DB_DADOS".UA[12].CHECK_IN_DATE	data do check-in
DB1.DBD116	"DB_DADOS".UA[12].CHECK_IN_TIME	hora do check-in
DB1.DBW112	"DB_DADOS".UA[12].USERID	Identificacao do utilizador registado na UA

Network: 40 UA 13

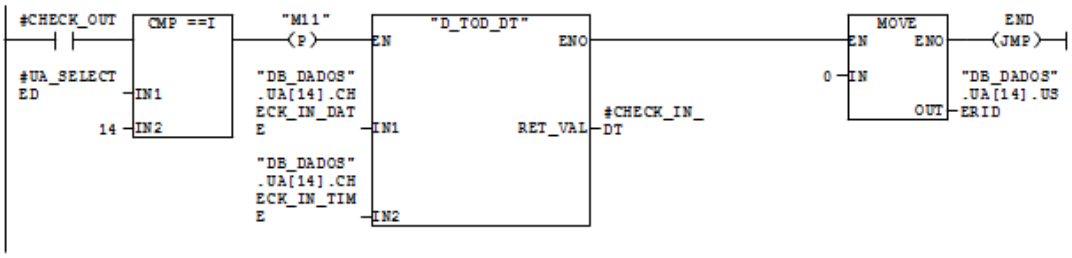


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW130	"DB_DADOS".UA[13].CHECK_IN_DATE	data do check-in
DB1.DBD126	"DB_DADOS".UA[13].CHECK_IN_TIME	hora do check-in
DB1.DBW122	"DB_DADOS".UA[13].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

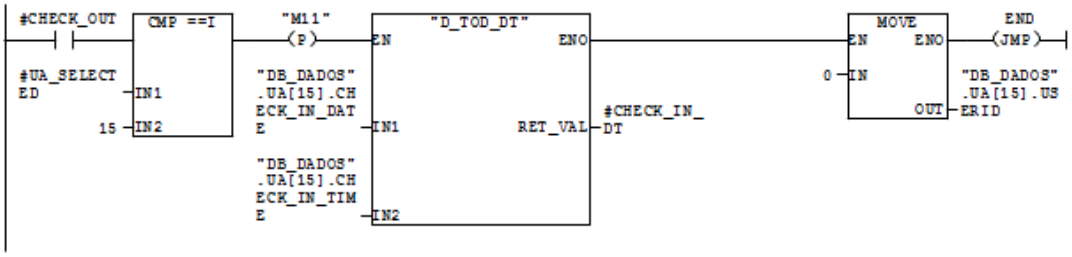
Network: 41 UA 14



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW140	"DB_DADOS".UA[14].CHECK_IN_DATE	data do check-in
DB1.DBD136	"DB_DADOS".UA[14].CHECK_IN_TIME	hora do check-in
DB1.DBW132	"DB_DADOS".UA[14].USERID	Identificacao do utilizador registado na UA

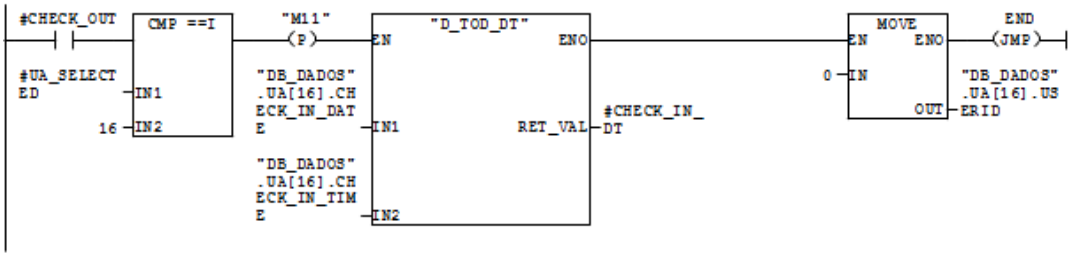
Network: 42 UA 15



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW150	"DB_DADOS".UA[15].CHECK_IN_DATE	data do check-in
DB1.DBD146	"DB_DADOS".UA[15].CHECK_IN_TIME	hora do check-in
DB1.DBW142	"DB_DADOS".UA[15].USERID	Identificacao do utilizador registado na UA

Network: 43 UA 16

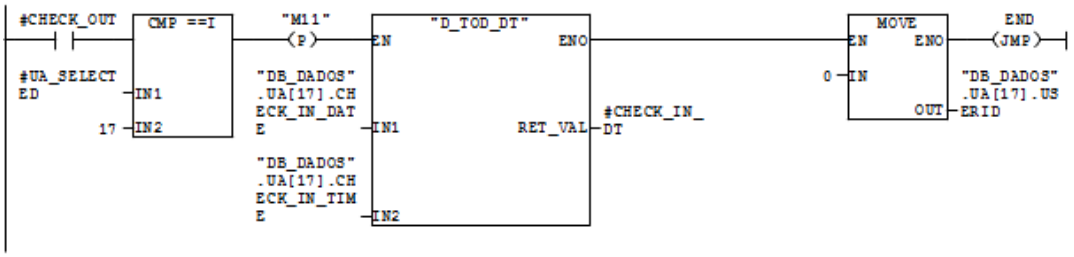


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW160	"DB_DADOS".UA[16].CHECK_IN_DATE	data do check-in
DB1.DBD156	"DB_DADOS".UA[16].CHECK_IN_TIME	hora do check-in
DB1.DBW152	"DB_DADOS".UA[16].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

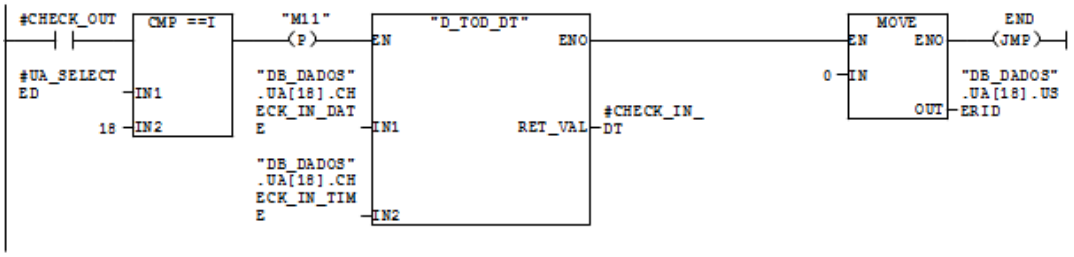
Network: 44 UA 17



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW170	"DB_DADOS".UA[17].CHECK_IN_DATE	data do check-in
DB1.DBD166	"DB_DADOS".UA[17].CHECK_IN_TIME	hora do check-in
DB1.DBW162	"DB_DADOS".UA[17].USERID	Identificacao do utilizador registado na UA

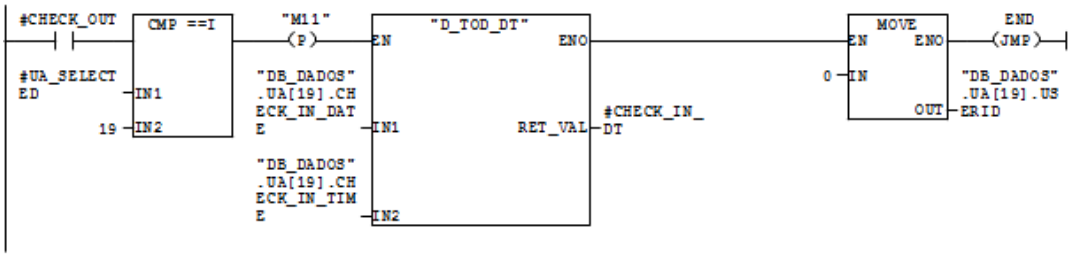
Network: 45 UA 18



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW180	"DB_DADOS".UA[18].CHECK_IN_DATE	data do check-in
DB1.DBD176	"DB_DADOS".UA[18].CHECK_IN_TIME	hora do check-in
DB1.DBW172	"DB_DADOS".UA[18].USERID	Identificacao do utilizador registado na UA

Network: 46 UA 19

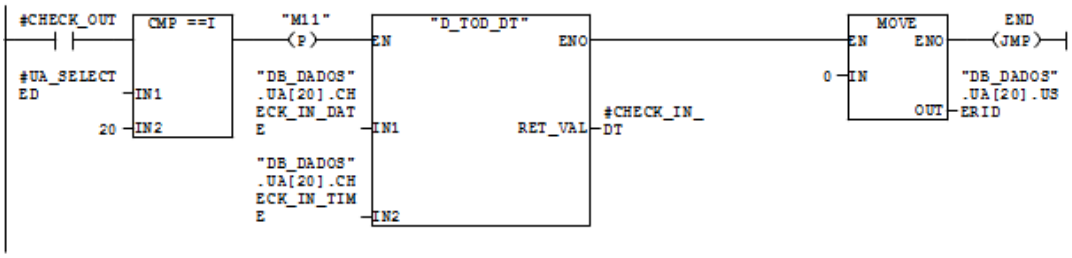


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW190	"DB_DADOS".UA[19].CHECK_IN_DATE	data do check-in
DB1.DBD186	"DB_DADOS".UA[19].CHECK_IN_TIME	hora do check-in
DB1.DBW182	"DB_DADOS".UA[19].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

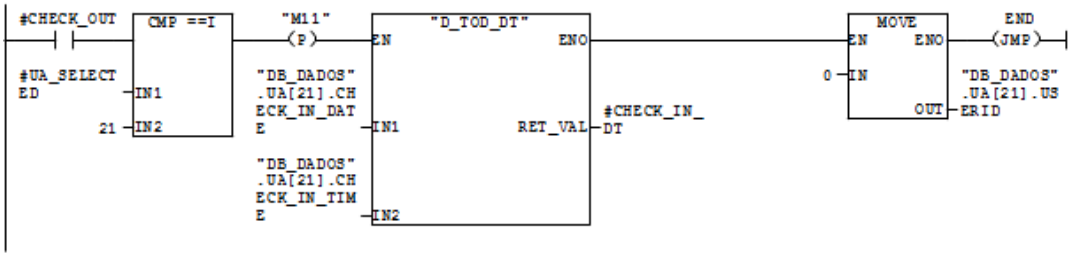
Network: 47 UA 20



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW200	"DB_DADOS".UA[20].CHECK_IN_DATE	data do check-in
DB1.DBD196	"DB_DADOS".UA[20].CHECK_IN_TIME	hora do check-in
DB1.DBW192	"DB_DADOS".UA[20].USERID	Identificacao do utilizador registado na UA

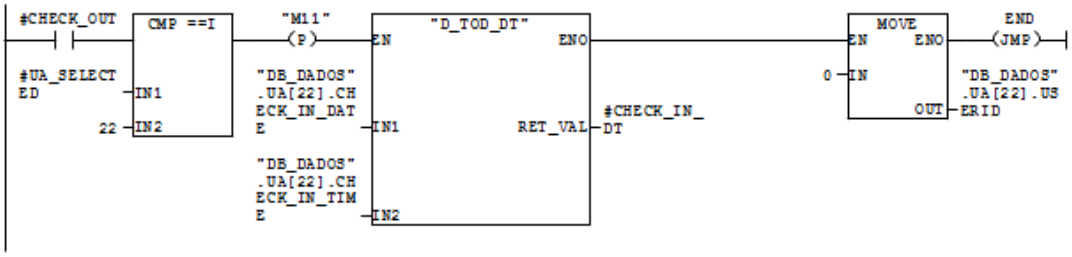
Network: 48 UA 21



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW210	"DB_DADOS".UA[21].CHECK_IN_DATE	data do check-in
DB1.DBD206	"DB_DADOS".UA[21].CHECK_IN_TIME	hora do check-in
DB1.DBW202	"DB_DADOS".UA[21].USERID	Identificacao do utilizador registado na UA

Network: 49 UA 22

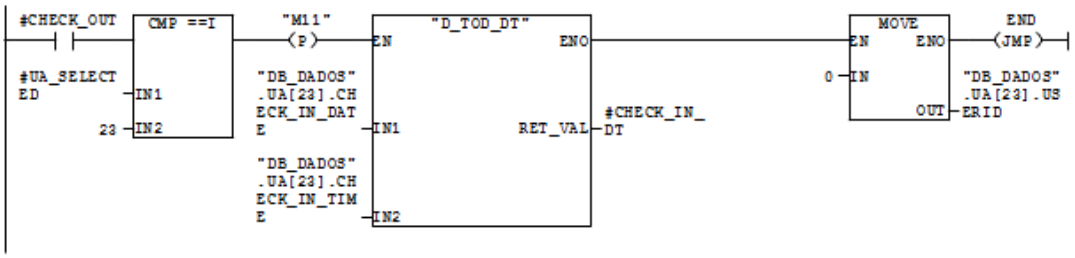


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW220	"DB_DADOS".UA[22].CHECK_IN_DATE	data do check-in
DB1.DBD216	"DB_DADOS".UA[22].CHECK_IN_TIME	hora do check-in
DB1.DBW212	"DB_DADOS".UA[22].USERID	Identificacao do utilizador registado na UA

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

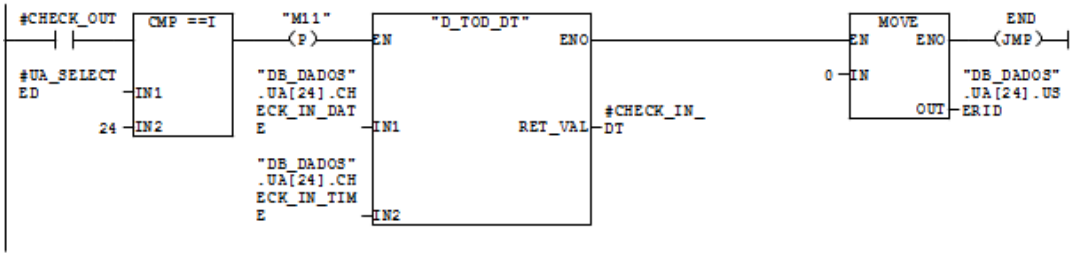
Network: 50 UA 23



Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW230	"DB_DADOS".UA[23].CHECK_IN_DATE	data do check-in
DB1.DBD226	"DB_DADOS".UA[23].CHECK_IN_TIME	hora do check-in
DB1.DBW222	"DB_DADOS".UA[23].USERID	Identificacao do utilizador registado na UA

Network: 51 UA 24

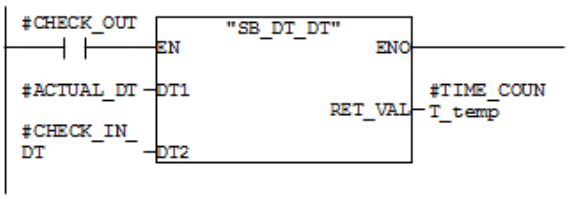


Symbol information

M2.4	M11	
FC13	D_TOD_DT	Date and TOD to DT
DB1.DBW240	"DB_DADOS".UA[24].CHECK_IN_DATE	data do check-in
DB1.DBD236	"DB_DADOS".UA[24].CHECK_IN_TIME	hora do check-in
DB1.DBW232	"DB_DADOS".UA[24].USERID	Identificacao do utilizador registado na UA

Network: 52 Termina a

Network: 53 END Check-out



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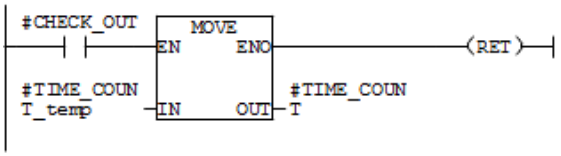
SIMATIC ...trolador\CPU 314IFM-CPU\...\FC8 - <offline> 09/21/2011 16:28:45

Symbol information
FC34 SB_DT_DT Subtract DT - DT

Network: 54



ANEXO II-XI

FC9 “FC_OPERATION”

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC9 - <offline> 09/21/2011 16:28:50

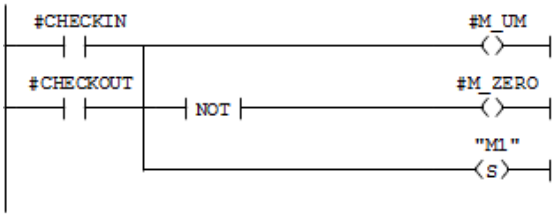
FC9 - <offline>

"FC_OPERATION" Cordena a operacao de checkin checkout
Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 15:18:58
Interface: 26-07-2011 15:37:39
Lengths (block/logic/data): 00592 00446 00006

Address	Declaration	Name	Type	Initial value	Comment
0.0	in	UA_SELECTED	INT		Identificacao da UA seleccionada
2.0	in	CHECKIN	BOOL		Operacao de check-in
2.1	in	CHECKOUT	BOOL		
	out				
	in_out				
0.0	temp	M_UM	BOOL		Memoria Temporaria
0.1	temp	M_ZERO	BOOL		
0.2	temp	UA_OK	BOOL		
0.3	temp	UA_FAIL	BOOL		
0.4	temp	M_ALARM	BOOL		

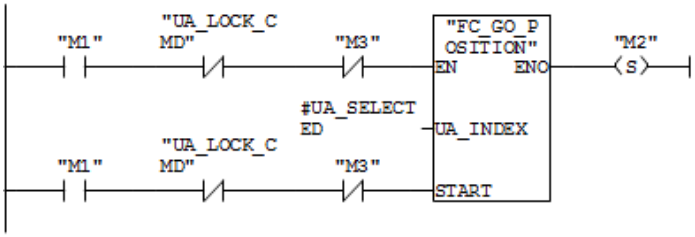
Block: FC9 Funcao de controlo da operacao de movimento da UA

Network: 1 Inicia o processo



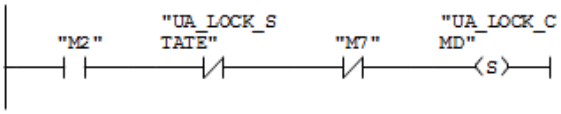
Symbol information
M1.0 M1

Network: 2 Movimenta a UA da posicao HOME ate a posicao de armazenamento



Symbol information
M1.0 M1
Q125.7 UA_LOCK_CMD Bloqueia a UA na plataforma do elevador
M1.2 M3
FC5 FC_GO_POSITION Funcao que cordena o movimento do MA para a ZER
M1.1 M2

Network: 3 Bloquea a UA na plataforma superior para o inicio do movimento

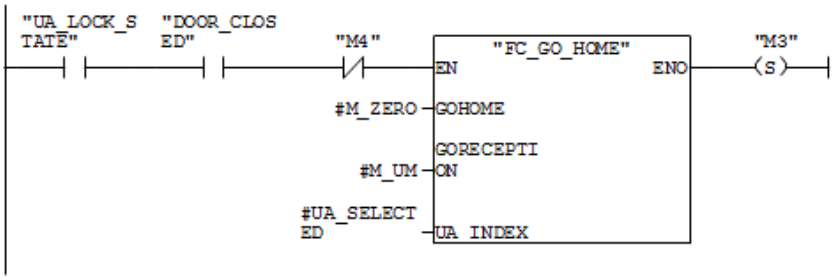


Page 1..

SIMATIC ...trolador\CPU 314IFM-CPU\...\FC9 - <offline> 09/21/2011 16:28:50

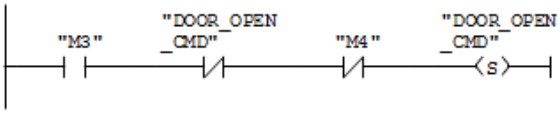
```
Symbol information
M1.1          M2
I124.7        UA_LOCK_STATE       Estado do bloqueio da UA
M1.6          M7
Q125.7        UA_LOCK_CMD         Bloqueia a UA na plataforma do elevador
```

Network: 4 Transporta a UA da sua posicao ate a recepcao



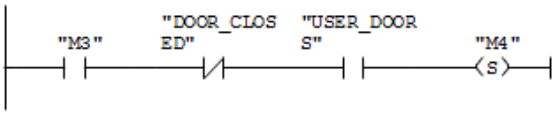

```
Symbol information
I124.7        UA_LOCK_STATE       Estado do bloqueio da UA
I125.1        DOOR_CLOSED         Portas automaticas - Estado Fechadas
M1.3          M4
FC6           FC_GO_HOME          Funcao que cordena o movimento do robo para a posicao HOME
M1.2          M3
```

Network: 5 Comanda a abertura e fecho das portas



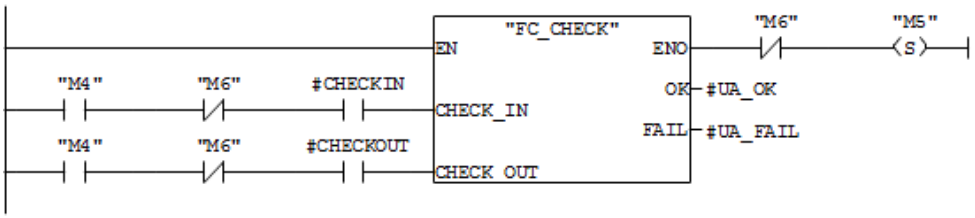

```
Symbol information
M1.2          M3
Q124.0        DOOR_OPEN_CMD       Comando de Abertura das Portas
M1.3          M4
```

Network: 6 Inicia o processo de verificaocao apos ordem de fecho das portas




```
Symbol information
M1.2          M3
I125.1        DOOR_CLOSED         Portas automaticas - Estado Fechadas
I126.1        USER_DOORS          Comanda Utilizador fecho das portas
M1.3          M4
```

Network: 7 Faz a verificacao do interior da UA.

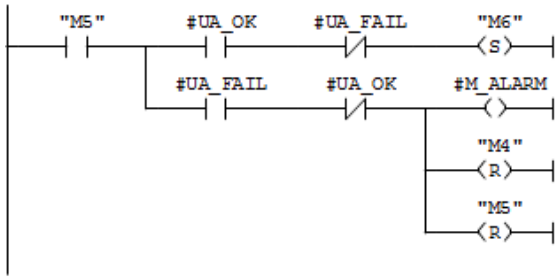


Symbol information

M1.3	M4	
M1.5	M6	
FC7	FC_CHECK	Verifica o conteudo da UA
M1.4	M5	

Network: 8 Fecha as portas ou emite ALARME em caso de conteudo invalido

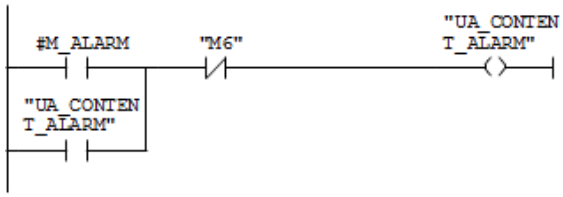
RM4 e RM5



Symbol information

M1.4	M5
M1.5	M6
M1.3	M4

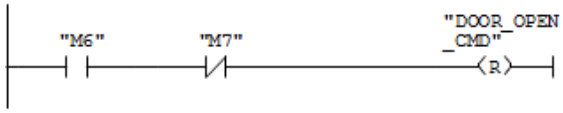
Network: 9



Symbol information

Q124.6	UA_CONTENT_ALARM	Alarme de conteudo da UA invalido
M1.5	M6	

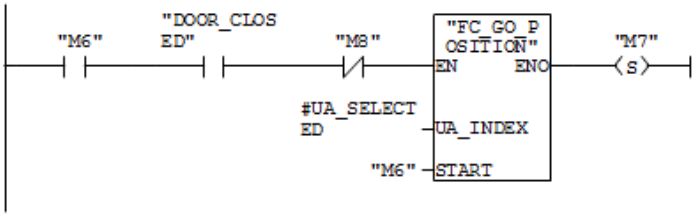
Network: 10 Fecha a porta



Symbol information

M1.5	M6	
M1.6	M7	
Q124.0	DOOR_OPEN_CMD	Comando de Abertura das Portas

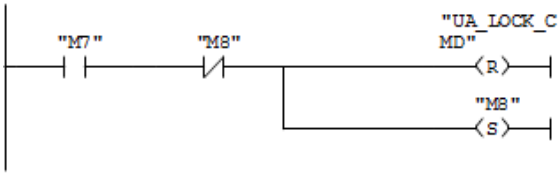
Network: 11 Volta a colocar a UA na sua posicao original



Symbol information

M1.5	M6	
I125.1	DOOR_CLOSED	Portas automaticas - Estado Fechadas
M1.7	M8	
FC5	FC_GO_POSITION	Funcao que cordena o movimento do MA para a ZER
M1.6	M7	

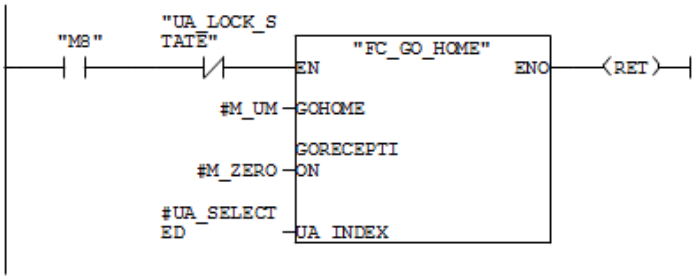
Network: 12 Desbloqueia a UA na sua posicao original



Symbol information

M1.6	M7	
M1.7	M8	
Q125.7	UA_LOCK_CMD	Bloqueia a UA na plataforma do elevador

Network: 13 Transporta o robo ate a posicao home e termina



Symbol information

M1.7	M8	
I124.7	UA_LOCK_STATE	Estado do bloqueio da UA
FC6	FC_GO_HOME	Funcao que cordena o movimento do robo para a posicao HOME

ANEXO II-XII

DB1 “DB_DADOS”

SIMATIC ...trolador\CPU 314IFM-CPU\...\DB1 - <offline> 09/21/2011 16:28:58

DB1 - <offline>

"DB_DADOS" Guarda o registo dos utilizadores e dos ciclos de utilizacao

Name: Family:
Author: Version: 0.1
Block version: 2
Time stampCode: 21-09-2011 15:54:46
Interface: 21-09-2011 10:41:26
Lengths (block/logic/data): 00352 00244 00000

Block: DB1

Address	Name	Type	Initial value	Comment
0.0		STRUCT		
+0.0	DB_VAR	INT	0	Temporary placeholder variable
+2.0	UA	ARRAY[1..24]		Matriz de dados das UA
*0.0		STRUCT		
+0.0	USERID	INT	0	Identificacao do utilizador registado na UA
+2.0	CICLES_COUNT	INT	0	Registo do numero de ciclos da UA
+4.0	CHECK_IN_TIME	TIME_OF_DAY	TOD#0:0:0.0	hora do check-in
+8.0	CHECK_IN_DATE	DATE	D#1990-1-1	data do check-in
=10.0		END_STRUCT		
=242.0		END_STRUCT		